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1st International Conference

Higher Education in Function of Sustainable Development of Tourism in Serbia and Western Balkans

STUDENTS' PAPERS PROCEEDINGS





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STUDENTS' PAPERS PROCEEDINGS

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PREFACE

First International Conference "Higher Education in Function of Development of Tourism in Serbia and Western Balkans", that will be held within the SED 2014 Conference, is one of the results of the TEMPUS project No. 544543-TEMPUS-1-2013-1-RS-TEMPUS-JPCR entitled "Modernization and Harmonization of Tourism Study Programs in Serbia" (MHTSPS), implemented by:

- Business and Technical College of Vocational Studies, Uzice, Serbia, lead partner,

- Novi Sad Business School - Higher Education Institution of Professional Studies, Novi Sad, Serbia,

- University of Kragujevac, Faculty of Hotel Management and Tourism, Vrnjacka Banja, Serbia,

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- Tourism Organization of Western Serbia, Uzice, Serbia,
- Tourism Organization of Leskovac, Leskovac, Serbia,
- University of Greenwich, London, United Kingdom
- -Technological Education Institute of Piraeus, Athens, Greece, and
- University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania.

Project is funded by the European Union, while EACEA - Brussels, and Tempus Office - Belgrade, provided a great help in its implementation through valuable suggestions that enabled achievement of desired quality level of both implementation process and project results.

Work plan of this TEMPUS project has envisaged organization of two more International conferences, with the objective of successful dissemination of project results.

The aim of this International Conference is that scientists and experts in the field consider and clarify the role of higher education in the development of tourism in the Western Balkans and Serbia. Beside the researchers from partner institutions participating in the MHTSPS project, the representatives of eight European countries took part in the Conference work. Participation of talented students is of special importance and will contribute to the sustainability and dissemination of the project and its results.

This Conference resulted in two Paper Proceedings. The first Conference Proceedings encompass articles of scientists and experts in the field, while the other one is a collection of student papers. All papers have been reviewed, and authors themselves bear the full responsibility for papers quality.

Užice, September 2014

Editors

















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THE EFECTS OF THE EXIT FESTIVAL ON TRAFFIC OF TOURISTS IN NOVI SAD

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Abstract: The Exit festival is an event that lasts several days and attracts hundreds of thousands visitors from Serbia and the Balkans, from Europe and the whole world. Exit is, at the same time, a device that sends a positive image of Serbia into the world. Thanks to The Exit Festival, Novi Sad has become a synonym for quality music, youth, and a positive outlook on life. After more than a decade of continuous development, as one of the most important music festivals, Exit with the power of an established brand wants to position itself as a leader in mobilizing public opinion and decision makers in three areas in which it has set new standards: youth development, creative industry and branding Novi Sad as a tourist destination. In times of alienation, apathy and indifference for others, Exit has offered everything to the contrary, making Petrovaradin Fortress a place for coming together, a place of admiration, love and hope, for the duration of the festival. The Exit festival has in large popularized Novi Sad on the world map. Only a small percent of the local population knows that Novi Sad was declared the best tourist destination for July 2008 thanks to Exit. It was placed before New York, Paris, Hawaii and The Maldives by "The Guardian" whose charts stand for one of the most representative in the world. Before Exit that would have been nearly impossible. News like that would have sounded like a good joke.¹ Due to the need for accommodating tens of thousands of tourist coming to the festival, the Tourist organization of Novi Sad was founded in 2005.

Key words: Novi Sad, Exit, music festival, traffic of tourists, Petrovaradin Fortress.

1. INTRODUCTION

Novi Sad is a medieval city in the Podunavlje district with a well preserved cultural and spiritual tradition. It is located in the south of Bačka, on the banks of The Danube and in the foothills of Fruška Gora. It stands as an industrial, cultural, educational and multifunctional centre of Vojvodina. As a town where the first Serbian newspaper was published, where The Matica Srpska continues to function, where the first national theatre was founded, Novi Sad represents the centre of Serbian culture from the time of The Austrian Empire and The Austro-Hungarian monarchy (Zakić L., 2007). The presence of many nations and national minorities in Novi Sad has resulted in a rich multinational culture that spans over several centuries, enabling the initiation of tourist traffic on these premises. The symbol of Novi Sad is Petrovaradin Fortress, a cultural heritage of great significance. For tourists of interest is the old city centre, which stands witness to the past but, at the same time represents todays social and cultural life. Profound architecture from the past and present, numerous museums, art galleries and much more make Novi Sad a

¹ Magazine "The Guardian", London, Monday, July 10th, 2006









cultural treasury, justifying its title "Serbian Athens". The cultural profile of the whole city is made out of newly founded institutions which, like Exit, take part in creating a new identity of the modern day Novi Sad, a city of this generation. Therefore, Exit is a music festival that came to be as a consequence of social activism of young people in October of 1999. The initial hypotheses on which this paper is based on is that The EXIT Festival has an effect on the growing number of tourists in Novi Sad, therefore the profits made in the touristic branch on these premises are greater. The goal of this paper is to show the effects of The Exit festival on the city of Novi Sad itself, the citizens of Novi Sad and the tourist traffic in Novi Sad utilizing secondary sources of information. The methodology used for the purpose of this paper is desk research as well as different secondary sources of information.

2. THE AFIRMATION OF EXIT ON PETROVARADIN FORTRESS

The Exit festival was officially founded in July of 2000 with the purpose of motivating the young people of Novi Sad to actively take part in social processes. The democratic changes that occurred on the 5th of October also brought into question the future of the Exit festival. The vision at that time was that it was necessary to, though a large international music festival, try and make up for the "lost decade" for young people, not only in Serbia but in the entire region. The so called "Zero Exit" or "Noise Summer Fest" was, besides its generally known role in the pre 5th of October campaigns, marked in the minds of the citizens of Novi Sad as an unforgettable phenomenon. The generation of eighteen year olds and other youth had, maybe for the first time in their lives that they are not as unusable mass without a future but, rather that they are capable of contributing to creating a general wellbeing by giving their voice to change.

All the while, Exit with its two stages ("River" and "Forest" that will in the later years become the Exit festival camp site), during a hundred hot days and nights, provided all sorts of multimedia programs (comprised of concerts, performances, movie projections in the open, day time workshops and stands) the impacted the monotony of the Vojvodina's humid days. And all of this was available at an affordable price.

At the same time, in accordance to the steady thesis that the citizens in Vojvodina are predominately of democratic orientation, in the public opinion an idea began to form that Exit didn't come to be by mere chance in this city. Citizens of Novi Sad created Exit and Exit gathered the citizens: in this climate, Exit began to represent Novi Sad, and Novi Sad began to represent Exit. The first few Exit festivals were marked with a cultural theme. Maybe the youths of Serbia couldn't afford to travel the world but Exit brought the world to them. After the "zero Exit" was finished and with the completion of its purpose, the following year the festival took on a new form – it was moved to Petrovaradin Fortress, limited to ten days, and in its repertoire, besides the most popular bands from Serbia, many famous manes of foreign performers were included. Music styles: reggae, metal, electro or rock music were distributed on seven stages, some stages were solely for Serbian performers from the region, while the biggest stars performed on the best equipped stage ("Main Stage") – Finely Quaye, Banco de Gaia, Kosheen.

During the following years, Exit continued to upgrade several of its aspects and happenings tied to the festival. In 2003, the duration of the festival was reduced to four days, on behalf of improving the quality of the performers. For the third festival another









stage was added, mainly focusing on foreign music, while the theatre and cinema were no longer included. Exit, even, became a self-proclaimed country "State of Exit", which gained its own emblem and flag, and the visitors would, with the purchase of a semi expensive ticket (in the form of an ID) become its "citizens". The festival, with every ones favorite location – Petrovaradin Fortress, and the camp site on the banks of The Danube, became a unique combination of a music festival, cultural happening and a beach party. In the following years the number of stages increased and their music orientation changed. That change was not only inevitable but also the only one possible. Starting with the second festival in 2002, the festival gained considerable media coverage, with the help of a vast number of domestic and foreign journalists, multiple reports in newspapers and a large airing time in many television programs (Golić B., 2003). Two years later, reporters from the music television channel MTV were sent to Novi Sad to make a documentary about the city, the fortress and the festival. Also, collaborating with MTV, Exit became a world famous promoter from the fight against human trafficking. The same year, The BBC 1 aired live performances from the festival.

The target group of Exit was everyone who loves quality music and wants to be surrounded by people with similar life styles. Exit has always paid a lot of attention to groups of people with special needs, minority groups and other endangered groups. The concept of the program for the festival was always the result of the synergetic expectations of the audience and the prudence of the organizers of what the best music direction to take is for assuring the best image and development of the festival. The slogan for the Exit Festival 2013 was R:EVOLUTION, whose goal was to point out the social roots of Exit and to proudly show that it is precisely the social engagement, the thing that separates Exit from almost all the other music festivals in Europe. It is this fact that, for the most part, contributes to the great reputation Exit has in the world. The social campaign that marked 2013 was the realization of the conference about national branding, named R:BRAND SERBIA. The conference was held on the birth date of the great scientist and inventor Nikola Tesla. Also, it is not coincidental, that the festival began on the same day with a performance on the main stage dedicated to Nikola Tesla. Besides the above mentioned conference, other important social questions were brought to the public, as well as many other activities. Among them being the European festival ecological conference, held precisely in Exit (/http://wannabemagazine.com/wannabe-intervju-dusan-kovacevic-exit/).

Exit has the most original location where it is held, compared to other European festivals. Petrovaradin Fortress presents a particular trait of Exit. The pearl of our heritage, The Gibraltar on The Danube, an undefeatable fortress are synonymous for the rocky hill upon which, in the duration of four days, the biggest party of Exit takes place (http://www.exitfest.org/sr).

Most visitors miss the opportunity to explore the rest of the fortress during the days of the festival, but the mysteriousness of the fortress is noticeable at first glance. With that, the excitement during the festival rises day by day. Perhaps Petrovaradin Fortress is not the ideal place for Exit to be held at, but the unusual spatial distribution and levelling of its walls and beams, good acoustics and the possibility for different performances to be held side by side without the mixing of the sounds, for fourteen years enabled the dense deployment of stages.









3. METHODOLOGY

For the purpose of writing this paper multiple analyses were conducted of data gathered from various secondary sources. *Desk research*, as a method was used during the making of this paper. The data was collected from the Republic Institute for Statistics, as well as from internet sources and vast literature that covers various aspects of the festival, all with the goal to provide the best quality data.

4. RESULTS AND DISCUSION

According to the data collected from "The Republic Institute for Statistics" an analysis of the change in number of tourist in Novi Sad during The Exit Festival. The gathered data show that during the festival (Jun – July, depending on when the festival took place) the number of overnight stays in Novi Sad increases compared to other months of the year. The study was conducted by comparing data of overnight stays in Novi Sad for the period of five years. The following tables show the variations of the number of tourists (domestic, foreign, and the total number of tourists) in Novi Sad during the festival.

Month	Number of visits			Number of overnight stays		
Monin	Total	Domestic	Foreign	Total	Domestic	Foreign
January	4.819	2.354	2.465	8.515	3.714	4.801
February	4.625	2.160	2.465	8.358	3.621	4.737
March	5.357	2.462	2.895	9.629	3.711	5.918
April	7.000	3.457	3.543	13.339	4.936	8.403
May	11.587	5.938	5.649	19.651	8.570	11.081
Jun	7.070	2.589	4.481	13.403	4.370	9.033
July	<mark>7.017</mark>	<mark>2.199</mark>	<mark>4.818</mark>	<mark>16.802</mark>	<mark>4.964</mark>	<mark>11.838</mark>
August	5.025	1.800	3.225	10.897	4.120	6.777
September	7.242	3.297	3.945	15.300	6.088	9.212
October	13.219	7.843	5.376	25.851	12.607	13.244
November	5.638	2.854	2.784	10.671	4.570	6.101
December	5.382	2.653	2.729	9.293	3.753	5.540

Table 1: Number of visits and overnight stays in Novi Sad in 2009

Source: / http://webrzs.stat.gov.rs /

The total number of foreign tourists in 2009 was 96.685, which is 2% more than in 2008. In the first four months of 2010 an increase of 3%, of the total number of visits to Novi Sad has been noted compared to the same period in the previous year, while the number of overnight stays has risen by 8%.









3.6 .1	Number of visits			Number of overnight stays		
Month	Total	Domestic	Foreign	Total	Domestic	Foreign
January	3.416	1.440	1.976	6.393	2.340	4.053
February	4.007	1.701	2.306	7.585	2.761	4.824
March	4.927	2.149	2.778	9.089	3.299	5.790
April	7.215	3.791	3.424	12.012	5.336	6.676
May	12.106	6.337	5.769	19.418	8.518	10.900
Jun	7.066	2.717	4.349	13.082	4.769	8.313
July	<mark>10.865</mark>	<mark>2.217</mark>	<mark>8.648</mark>	<mark>23.461</mark>	<mark>5.037</mark>	<mark>18.424</mark>
August	6.208	2.044	4.164	13.219	5.170	8.049
September	8.979	4.195	4.784	16.118	7.055	9.063
October	14.294	9.132	5.162	24.307	14.331	9.976
November	7.249	3.419	3.830	13.088	5.679	7.409
December	6.288	2.728	3.560	10.575	3.886	6.689

Table 2: Number of visits and overnight stays in Novi Sad in 2010

Source: / http://webrzs.stat.gov.rs /

Month		lumber of visits		Number of overnight stays		
Monin	Total	Domesti c	Foreign	Total	Domestic	Foreign
January	4.503	1.907	2.596	8.553	3.471	5.082
February	5.773	1.781	3.992	13.920	3.272	10.648
March	6.011	2.430	3.581	10.963	3.697	7.266
April	8.646	3.921	4.725	14.725	5.545	9.180
May	14.926	7.266	7.660	25.386	9.659	15.727
Jun	8.972	2.577	6.395	17.296	4.132	13.164
<mark>Jul</mark> y	<mark>12.261</mark>	<mark>2.037</mark>	<mark>10.584</mark>	<mark>41.287</mark>	<mark>5.100</mark>	<mark>36.187</mark>
August	6.725	1.661	5.064	14.981	4.461	10.520
September	10.640	4.761	5.879	19.753	8.673	11.080
October	14.938	9.592	5.346	24.888	15.249	9.639
November	5.904	2.511	3.393	10.588	3.709	6.879
December	6.774	2.978	3.796	11.209	3.958	7.251

Source: / http://webrzs.stat.gov.rs /

The total number of visits increases by 14,9% and the number of overnight stays in 2011 increases by 26,9%. The increase of the total number of foreign overnight stays by 42,2% in 2011 compared to the previous year indicates the same.

In 2012, Novi Sad had 220.842 overnight stays, both of domestic and foreign tourists, which is 3,5% more than the previous year. In December of 2012 there has been 19,4% more overnight stays than the in the same month of previous year. Compared to December of 2011 there









has been an increase of 24,1% in overnight stays made by foreign in December of 2012. While the number of domestic tourists has risen by more than 10,7% in the same month. In August of 2013 Novi Sad was visited by 60,6% more foreign tourist than in the same month of the previous year. From the beginning of the year in Novi Sad there were more than 157.000 overnight stays of which about 20.000 were made in August.

Table 4. Number of visus and overhight stays in Novi Sud in 2012						
Month	Number of visits			Number of overnight stays		
	Total	Domestic	Foreign	Total	Domestic	Foreign
January	5.791	1.918	3.873	14.788	3.739	11.049
February	3.951	1.881	2.070	7.112	3.026	4.086
March	6.741	2.871	3.870	13.114	4.497	8.617
April	7.709	3.503	4.206	13.669	5.038	8.631
May	14.093	6.694	7.399	24.210	9.070	15.140
Jun	9.091	3.452	5.639	17.542	5.596	11.946
<mark>Jul</mark> y	<mark>13.608</mark>	<mark>4.164</mark>	<mark>9.444</mark>	<mark>41.702</mark>	<mark>12.575</mark>	<mark>29.127</mark>
August	7.146	2.018	5.128	13.081	3.041	10.040
September	11.700	5.472	6.228	21.313	8.460	12.853
October	14.455	8.481	5.974	27.557	12.667	14.890
November	7.348	2.761	4.587	13.376	4.120	9.256
December	7.136	3.146	3.990	13.378	4.382	8.996

Table 4: Number of visits and overnight stays in Novi Sad in 2012

Source: / http://webrzs.stat.gov.rs /

From 2005, the festival takes on an important social role. With the first inflow of foreign tourists from the west, along with the cultural contributions, the festival starts showing signs of touristic contributions to the vast social community. Independent research has shown that The Exit Festival brings around 15 million euro to the Serbian economy per year. So far, through the tourist industry (accommodation, food, hospitality etc.) the festival has brought over a hundred million euro to Serbia. The festivals good reputation has resulted in the increase of guests from The European Union, starting with the countries that are closer, like Hungary and Greece, and then other counties of west and north Europe, even from The U.S.A and Australia. With the growing popularity of the festival, the overall image of Serbia has bettered, not only because of the number of people that come to Exit, but also because of the positive context in which the country is mentioned in. The city – host Novi Sad, is inseparable from the festival activities and every summer hosts hundreds of young guests, who completely identify it with the festival. In the last few years, the number of visitors that pass through The Petrovaradin Gates during the four days of the festival has amounted between a 150 and 200 thousand.

Almost a third of that number are foreign visitors, in the second half of the decade there has been a noticeable increase in popularity of this festival with The British, who make up 8% of foreign guest. In 2013, Exit has, in large, brought back the domestic public to it. However, the organizers of the festival prefer not to divide the public into "domestic" and "foreign", but instead they like to think that Exit is meant for progressive young people, no









matter where they are, what skin colour, religion or nation they are. The best festival experience is when there's mix of different cultures and languages which gives the festival a unique feeling. This year, in particular there has been a noticeable increase of people from Novi Sad. Almost never in the history of the festival has there been an occurrence of the night life in Novi Sad being completely deserted.

Month	Number of visits			Number of overnight stays		
Monin	Total	Domestic	Foreign	Total	Domestic	Foreign
January	4.878	2.332	2.546	9.385	4.160	5.225
February	5.199	2.027	3.172	10.359	3.206	7.153
March	7.362	2.883	4.479	13.917	4.020	9.897
April	8.643	3.578	5.065	15.568	5.520	10.048
May	16.098	7.407	8.691	26.277	9.775	16.502
Jun	9.859	2.841	7.018	22.354	5.473	16.881
<mark>Jul</mark> y	<mark>13.935</mark>	<mark>4.073</mark>	<mark>9.862</mark>	<mark>39.993</mark>	<mark>12.086</mark>	<mark>27.907</mark>
August	9.678	2.418	7.260	19.975	3.846	16.129
September	10.383	3.812	6.571	18.932	6.522	12.410
October	13.603	6.869	6.734	25.230	11.399	13.831
November	8.700	3.055	5.645	18.383	6.064	12.319
December	9.161	3.012	6.149	20.139	5.463	14.676

 Table 5: Number of visits and overnight stays in Novi Sad in 2013
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Source: / http://webrzs.stat.gov.rs /

Thinking of the connection between Exit and Novi Sad, we could ask ourselves how come a world famous festival came to be in this quiet, according to some even "slow", city on The Danube. The answer lies in the connection of several factors: the benignity of the geographic location on the river and in the foothills of Fruška Gora, the specific mentality of the citizens whose tastes and outlook on the world have always, in some measures, strived to the European, the diversity of nationalities and cultures of this city, as well as the uproar of young people in Vojvodina that, at first glance, is not visible.

5. CONCLUSION

What experts for management and development of tourism emphasize as a possible misjudgement made by the organizers of Exit could be characterized as the lack of cooperation between this institution and other cultural institutions in the city and its surroundings areas. This way, instead of offering tourists other content besides the festival, the huge cultural potential of the city stayed unutilized. There are certain favourable estimates of the number of foreign tourists, but no measures have been taken to keep the tourist in the city after the festival, and domestic tourists that come to the festival are not evidenced in the total touristic traffic of the city because many of them come to the city for only one night or are situated with relatives or friends (Zakić L., 2006, pp 49). Still, it can be stated that this biggest music festival on The Balkans gathers young people from all corners of the world,









promoting our country and culture. It is clear that Exit enabled the domestic public to hear some of the best musicians in the world, rock and pop legends, live and on their own soil. Also, the fact that Exit is the first happening on the territory of former Yugoslavia that has brought together young people from Serbia, Croatia, Bosnia and Hercegovina and Slovenia. countries that use should be to be at war. not disregarded (http://wannabemagazine.com/wannabe-interviu-dusan-kovacevic-exit/). In this Context, Exit has changed the identity of the city and the way it is experienced by visitors, as well as its own citizens. Observing the accomplishments that Exit has made so far, it can be concluded that the festival offered the city new touristic potential, and the state invaluable profits. Every year The Exit Festival gathers tens of thousands of tourists who spend more than 15 million euros in Novi Sad and Serbia, and it is estimated that in this way Exit has invested more than 100 million euro in Serbia and that in the next ten years it will bring more than 150 million euro of foreign currency to Serbian tourism (http://www.exitfest.org/sr/). There is an understanding between the festival and the state, but the state fails to understand the overall benefits that Exit brings Serbia. The festival itself is a unique product that would have difficulty sustaining itself in the Serbian economy. Namely, the cost of a ticket for similar happenings in the world amounts approximately around 200 euro, while the Serbian local market cannot handle an expense of more than 50 euro per ticket. The same goes for sponsorships, in The West festivals of this scale have a budget that is ten to twenty times bigger. There for, our county wants to have an inflow of millions of euro that come from the festival and for the world media to write about Serbia in superlatives. On this account, the festival organizers say that a long term plan needs to be formed in form of a public – private partnership between the state and the festival (http://wannabemagazine.com/wannabe-intervju-dusan-kovacevic-exit//).

REFERENCES

- 1. Magazine "The Guardian", London, Monday, July 10th, 2006
- 2. Zakić, L., Dragićević, V., (2007), *Analiza turističkog prometa Beograda i Novog Sada*", Prirodno matematički fakultet Zbornik radova Departmenta za geografiju, turizam i hotelijerstvo, Novi Sad, 36/2007,
- 3. Golić, B., (2003), *Marketing aktivnosti manifestacije Exit u Novom Sadu*, diplomski rad odbranjen na Odeljenju za geografiju, turizam i hotelijerstvo Prirodnomatematičkog fakulteta u Novom Sadu,
- Magazine " Wannabe", Intervju direktora Exit festivala Dušana Kovačevića, Beograd, October 24th, 2013, /<u>http://wannabemagazine.com/wannabe-intervju-dusan-kovacevic-exit//</u>
- 5. Zakić, L. (2006), *Perspektive razvoja turizma za mlade u Novom Sadu primer muzičkog festivala Exit*, Časopis Odeljenja za geografiju, turizam i hotelijerstvo Prirodno matematičkog fakulteta u Novom Sadu, Turizam 10, page 49.
- 6. Internet adress: /<u>http://www.exitfest.org/sr</u>/, date of access July 23rd, 2014.









ELEMENTS OF CONGRESS TOURISM AND THEIR IMPLEMENTATION IN THE TOURISM OFFER OF SERBIA

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Abstract: The subject of this paper is study of the concept and characteristics of congress tourism in general and its impact on the tourism development in western Serbia, Zlatibor - which possesses the necessary infrastructural facilities for conferences and an attractive tourist destination in the region. According to the Tourism Strategy of the Republic of Serbia from 2005, this form of tourist movement is considered as one of the primary tourist products to be developed in Serbia, therefore, the aim of this paper is to analyze the main characteristics of congress tourism in Serbia and Zlatibor.

Key words: congress, Zlatibor, congress tourism, MICE

1. INTRODUCTION

Today, congress tourism is considered as one of the most important sectors of the tourism industry. For organizing meetings outside the main tourist season and high off-season spending, the biggest part of the tourism revenues overall belongs to congress tourism. At the conference market in the world, especially in Europe, the competition is remarkably high because of the variety of events and more meaningful conference infrastructure. Our position in the international congress organizations is renewed and Serbia is more actively involved in the organization of international conferences. Serbia takes 47th place in the ICCA list, accounting for only 2 percent of the international conference market (ICCA, www.icaworld.com).

Demand for new congressional destinations and services is constantly increasing and becoming more demanding in line with globalization and the inclusion of new markets in the sphere of interests of major international corporations. EU enlargement brings new offer of new destinations, one of which is our country. So far in Serbia two top destinations with the best conference facilities are Belgrade and Novi Sad, in addition to the two cities best destination for conferences is Zlatibor, which has plenty of hotels with the idea of congress tourism.

2. GENERAL CHARACTERISTICS OF CONGRESS TOURISM

According to AIEST, congress tourism is defined as "a set of phenomena and relationships arising from the travel and stay of persons who come together to exchange, predominantly scientific and technical information, a place where the meeting is not a permanent place of residence or work."(Association Internationale d' Experts Scientifiques du Tourisme)









It is a combination of travel, accommodation, organization of services designed for business people, which are known as the most demanding tourists. Congressional activity is specific and requires the involvement of many economic and non-economic activities. Congresses and Fairs are considered on the basis of urban tourism. Important features of congress tourism is not determined by time, i.e. congress season lasts the whole year, no matter the season.

Characteristics of congress tourism are:

- 1. It is held throughout the year, allowing continuous employment,
- 2. It refines the tourism sector and brings business to destinations that rely on winter or summer season,
- 3. Investing into business tourism leads to the development of the interior cities,
- 4. From investing in destination for business tourists needs (hotels, restaurants, transport) advantage of which the coming tourists and population may have benefit is achieved,
- 5. Business tourism stimulates new investments,
- 6. Business tourism offers more value for less negative consequences for the environment than mass tourism,

In order for some destination to be successful "congress destination" it must possess presence of the following elements:

1. Technical readiness for congresses (congress center, congress places, congress hall with hotel facilities, technical instruments and equipment),

- 2. Accommodation capacity,
- 3. Transportation infrastructure,

4.Congress Bureau (professional conference organizations, travel agencies qualified for congressional activity).

3. WHEN IT ALL STARTED?

The first trips for business reasons began to appear simultaneously with the appearance of the first forms of trafficking. With the development of urban centers and large empires like Egypt, Persia, Greece and Rome, the trade developed as well, so traveling to distant lands thousands of miles away in order to obtain different items and valuables become frequent.

In the period from 1750 till 1900, business trips and business tourism recorded a sharp growth in Europe, as a consequence of the industrial revolution, improving the road network and the establishment of railroads.

In the late 19th and early 20th century, trade associations, health institutions and political parties in Western Europe and the United States, organized large rallies, with the help of a wide network of different associations. The cities had quickly noticed the economic benefits of organizing these meetings, so the congress centers commenced to be established in them, in order to present a particular city as a congress destination, or a place suitable for holding meetings.

The first congress center in the United States opened in 1896, in Detroit, and soon after that in other cities: Cleveland in 1904, Atlantic City in 1908, Denver and St. Louis in 1909, Louisville and Los Angeles in 1910. Today, many cities around the world have congress centers.









A large number of congress centers in the United States led to the founding of the International Association of congress bureaus in 1914 which operates under the name of International Association of Conference - tourist bureau from 1974. The primary objective of this organization is to provide information exchange between members and promote reliable organizations and institutions that provide services necessary for the organization of the congress.

Unlike North America, congress activity in Europe has been developing a little bit slower and the Congress of Vienna, held from September 1914 till June in 1915 can be considered as the first international congress held in Europe, with the participation of representatives of the leading world powers of the time.

Factors that contributed to the rapid development of the congress tourism are:

- 1. the expansion of governmental and non-governmental organizations,
- 2. cooperation between the public and private sectors,
- 3. growth of multinational corporations and the need to maintain inter-regional meetings,
- 4. need for professional development,
- 5. incentives.

4. TYPES AND FORMS OF CONGRESS TOURISM

In recent times the term congress tourism use the abbreviation MICE (Meetings, Incentives, Congresses and Exhibitions). This part of the tourism market is an extremely important part of business, especially when it comes to the extension of the tourist season, increasing the attractiveness and economic effects that are achieved by the development of this part of the tourism market. This abbreviation is composed of (Štetić S., Šimičević D., Ćurčić N., 2013):

M- meetings

I- incentives

C-congresses

E- exhibitions

M- meeting - Meetings of companies, governments, associations. They usually involve about 50 participants. They require hotel stays and conference center. There are two types of meetings:

- association meetings for exchange of information among the participants of a few or one profession

- meetings of the corporations, or the meeting of people from several organizations or groups of companies, sometimes from several states.

I-incentives - the award, exhilarating trips for the best employees in a corporation.

C-conference - the meetings organized for discussion, presentation of facts, problem solving and consultations. Conferences can be public and governments conferences.

E-exhibitions – show certain items and items for sale to the certain groups and they are open to the public. There are 2 types of exhibitions: exhibition of crafts and consumer exhibitions.







5. ELEMENTS OF SUCCESS OF CONGRESS DESTINATION

The first element in the successful development of congress tourism is the existence of adequate conference infrastructure (specially built congress centers, conference rooms within the hotel or educational institutions), it is necessary to have proper accommodation facilities (hotel size harmonious to the size of congress center), good transportation links, and adequately trained personnel. The most important fact when deciding on the choice of congress destination are the quality of the accommodation and congress infrastructure, availability, distance and cost of travel itself. If the destination meets all of the elements, essential part of success of a destination like congress is "played" by marketing mix, which consists of the following elements:

- 1. the product, in this case the service, apropos whole experience which is experienced by the participant of the congress,
- 2. the promotion, which includes advertising in professional magazines and journal,
- 3. human resources, qualified personnel is inseparable from the service,
- 4. psychological atmosphere, includes the arrangement, brightness, temperature, ambient,
- 5. service after the conference, referring to the research, for example satisfaction with the conference, resolving of complaints, thanks for attending ...

6. ORGANIZING THE CONGRESS

Actors in the congress tourism are:

- 1. the organizers,
- 2. direct service providers (congress centers, hotels with conference room),
- 3. intermediaries (travel agencies, professional congress organizers),
- 4. the participants.

Participants of the congress or business travel are highly educated, skilled, reputable people, aged between 25 and 55 years.

The organization of the congresses and conferences is responsible work which is done by special companies, including specialized travel agencies. Smaller regional and national meetings are organized by the individual institutions or their associations as well. Scientific conferences are organized by individual universities or colleges.

Space for meetings depends on the number of registered participants, including the importance of the event. For mass, international conferences, attended by over 1,000 participants, the most suitable are specially built congress centers, because they have the halls of adequate capacity, the necessary technical equipment and professional staff.

The process of bringing a large congress to a destination begins with the organized market research 5-7 years before. This activity often receives support from state authorities in the country to run, but the work result is not guaranteed - the other destinations, often several of them, are in the competition to maintain the same congress.

The decision on which the holder of the job entrusted the organization of the congress to a host shall be brought 2-3 years before the event. Then the main part of the meeting organization begins.





Table 1: Statistical reports of the International Congress Association ICCA
(<u>http://www.kongresniturizam.com/Drzava/srbija</u>)

	2010	2011	2012
Rank	43	42	46
The number of international	46	55	52
congresses	40	55	52

7. BELGRADE, THE CONGRESS CITY

During the seventies and the eighties, Belgrade was the center where a number of sporting events, concerts, fairs, congresses worldwide have been organized. The largest of the congresses were: the Conference on Security and Cooperation, Ministerial Conference on Science and Technology in Europe and North America, annual meetings of the World Bank and the International Monetary Fund, the International Congress of Jurists at the "Sava" Center. In less than 20 years more than 200 meetings were held.

Table 2: Congress places of Belgrade							
Facility	Number of halls	Number of seats	No of seats in the largest hall				
Congress center "Sava"	15	7.000	4.000				
Trade Unions house	9	2.636	1.904				
Engineers technicians center	6	660	400				
Hotel"Intercontinental"	6	1.000					
Hotel "Pionir"	13	7.600	7.000				
Pioneers center	4	851	531				
Youth Center	5	1.298	628				
Belgrade Fair	5	2.260	1.500				
Hayat Regency	5	900	600				

Table 2: Congress places of Belgrade

8. CONGRESS CENTERS OF WESTERN SERBIA - ZLATIBOR

8.1. Olimp hotel - provides excellent opportunities for various forms of business content. The large conference room with capacity of 100 seats, equipped with all the necessary video and technical equipmentfor presentations.

8.2. "Srbija" congress center - a hall with appropriate audio and video equipment, capacity of 650 seats, conference hall and a gallery with small room of 100 seats.

8.3. "Mona" congress center - capacity of 500 seats. If necessary, this multifunctional space is divided into two or three independent units which have a comfortable hall. The space is equipped with the latest technology, air conditioning, sound system and light.

8.4. Special hospital "Čigota"- in its offer it has a congress hall with 300 seats, exhibition space, projection equipment and the ability for simultaneous interpretations. It possesses two smaller halls with 30 and 60 seats.









8.5. Congress center of "Palisad" hotel - on the first floor of congress center, there are two smaller rooms that, due to partitions, can be configured to a larger capacity. Capacity depends on the schedule, and the maximum is 90 seats. On the second floor of the CC Palisad there are three halls, with a capacity of 55 and 110 places. On the top floor of the CC Palisad is largest hall with 300 seats.



Picture 1: Zlatibor congress centers review

9. CONCLUSION

Congress tourism and congresses bring along a number of advantages. First of all, the replenishment of the capacities during the season and after season, with an important fact that the consumption of business tourists is much higher than the ordinary tourists.

The rich offer of accommodation facilities in Zlatibor, space for conferences and business meetings, in addition to the well-developed eco-tourism and ski trails Tornik, make this a desirable place for these forms of a sustainable business meetings and conferences. If Zlatibor wants to be one of the top destinations for maintenance of the congresses, it should offer its complete centers built for this purpose and provide the activities of business tourists before and after a congress, an improved transport infrastructure at the local level, and specialized staff.

REFERENCES

- 1. International Congress and Convention Association-ICCA- www.icaworld.com
- 2. Association Internationale d' Experts Scientifiques du Tourisme
- 3. Štetić S., Šimičević D., Ćurčić N.(2013), Specific forms of tourism, Belgrade
- 4. http://www.kongresniturizam.com/Drzava/srbija









COMPARATIVE ANALYSIS OF ETHNO VILLAGES OF ZLATIBOR REGION

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Abstract: In preserving the tradition through revival of ethno village, West Serbia and region of Zlatibor are especially standing out. Ethno villages lead us in the world of forgotten and unknown homeland of our ancestors. Ethno villages are more and more popular way of vacation. The goal is to bring more guests from abroad. And the goal of local government is to improve development of the region and promote beauties of Serbia. Further in this work, we did comparative analysis of ethno village Sirogojno and ethno village Terzica Avlija. The main differences of these two villages are in the materials from which they are built and type of construction. And the basic similarities are, beside the museum part, that they have other different workshops. Both villages represent traditional way of life of Zlatibor region. From the analysis, we conclude that these ethno villages complete the offer of Zlatibor as a touristic place. In spite of some lacks which appear, they deserve praises for invested effort to preserve tradition. We have to thank ethno villages for maintaining traditional Serbian culture and customs through the contents they offer.

Key words: ethno villages, Sirogojno, Terzica avlija, characteristics, analysis

1. INTRODUCTION

In order to preserve a tradition, ethno villages are emerging all over Serbia. Villages in Serbia have been forgotten for a long time, but more than any other they have been ready to welcome every guest and offer them a peace in nature. That is why ethno villages started to grow in these last decades – log cabins adapt, but now ones are built as well, and are very well designed. So the tourist of today has where to find nostalgia for old times. Ethno villages lead us to the world of forgotten and unknown homeland of our ancestors. West Serbia is especially prominent by its ethno villages, as well as Zlatibor region. Because of this we will analyze in detail ethno villages from these areas.

An ethno village is a touristic complex and represents an open museum. It represents tourism in its historic core, nurtures traditional lifestyle and conservation of historically valuable monuments of culture and rest of civilization. Since ethno centers belong to one of the types of ecotourism, we can say that it is a primer form of tourism based on natural forms in which main motivation of the tourist is sighting and enjoying the nature, as well as the traditional culture which prevails in this region. This type of ecotourism appeared as the need to satisfy tourist's needs for rest in nature as well as needs for visit of cultural goods and historical sites; it also brings economic benefits for local governments and country, but also to the local population.

2. ETHNO VILLAGE "SIROGOJNO"

2.1. Location and position of ethno village "Sirogojno"

Complex "Old village" in Sirogojno is cultural monument. It is one of the most significant touristic facilities in Zlatibor. Observing its location and position, it is situated 26 km from









center of Zlatibor on elevation of 890m. It is positioned nearby St. Peter and Paul's church, which is near center of the village itself, and it stretches on the area of 4,5 ha.

2.2. General characteristics of ethno village "Sirogojno"

Museum consists of two parts. The first one is the group of houses which preserved original look and purpose. The other one are houses which preserved its original look but purpose hasn't remained the same, they have been adapted and adjusted to the touristic needs. Those are apartments, souvenir shops and buildings. A permanent exhibition of the museum is consisted of two small cottages, which are a testimony of the living culture in Zlatibor region at the end of 19^{th} and beginning of 20^{th} centuries.

2.3. The building process of ethno village "Sirogojno"

The goal of foundation of this ethno village is nurturing and preserving old crafts; gathering and keeping handcraft objects, making country women literate and educated. Higher purpose was to contribute to more cultural and more humane living in village. It was built in 1979, but the process of forming end establishing lasted for several years. The job of establishing the village was not an easy one. With experts from various protection services from Belgrade (Ethnographic Museum Belgrade, Ethnographic Institute SANU, Republic Institute for Protection of Cultural Heritage) and National museum from Uzice, the location has been selected for an ethno village. Afterwards, the research has been done, with the goal not only to find the buildings to transfer to museum, but also to establish the way in which the cottage is organized, number and type of the cottage, interior design and changes on the house, causes which lead to that. Research was done by the team of members of Republic Institute for Protection of Cultural Heritage and representatives of RO "Sirogojno". Financial funds were provided by RO "Sirogojno" and Republic of Serbia. But the initiative alone for establishment of ethno village was started from an organization of home craft in Sirogojno, and achieved with persistence of Dobrila Vasiljevic-Smiljanic. Leader of the project was an architect, Ranko Frindrik, three ethnologists, phisicochemists, architects associates, carpenter - conservator, group of carpenters, masons and workers. Entire work on transforming and conservation is documented, so every object has its file.

2.4. Values and advantages of ethno village "Sirogojno"

The fact that the museum is under the protection of law as a cultural monument of exceptional importance proves that this is a significant value and unique museum in Europe. As a member of Association or Related Museums in Europe, the Sirogojno museum works in accordance with the provisions of the Declaration Ikoma.

The museum holds the recognition of the jury of European award for cultural heritage for the project "Houses of Zlatibor from 19th century until today".

One of the advantages of the museum is that it has the goal to revive old crafts, so some objects have got the new purpose as workshops to manufacture handmade objects. As a rare entity of this kind in Serbia which accomplishes its role, Ethno Park in Sirogojno, besides protection of material culture, through program of its activities protects spiritual culture of this region.

The Ethno village Sirogojno museum completes touristic offer of Zlatibor and satisfies the needs of the tourists. Tourists who visit Sirogojno, about 40 thousand of them per year, have the possibility of staying overnight in the logs equipped for such purposes, and they can taste traditional food which is made in special earthenware dishes.









In the world, Sirogojno is known as a Museum of knitters – jumpers and jackets are exposed which was a hit during the 1970s and the 1980s in shops in the USA, Japan, France, Iceland, etc. In our opinion, that was lucrative business of the last decades, so the entire northern Zlatibor benefited. Many village families supported themselves and educated the children.

2.5. Lacks and areas that can be improved in ethno village "Sirogojno"

One of the things that should be changed is high prices of boarding houses. Observing the questionnaire of some of the visitors the only flaw was high prices of lodging for the night and food. One of the problems several months ago was position of the manager of the Museum. Ministry of culture hasn't dealt with the issue of the manager for years, which caused problems in everyday activities of the museum, in expert things and tourist visits. At the same time, it caused problems for the Tourist Organization of Zlatibor, because it slowed collaboration when it was necessary to organize study tours for tour-operators and journalists.

To make a comparison of this type of village, we will introduce another ethno village and make similarities and differences between these two villages of Zlatibor region.

3. ETHNO VILLAGE "TERZICA AVLIJA" – ZLAKUSA

3.1. Location and position of ethno village "Terzica Avlija"

Ethno village "Terzica Avlija" is situated in village Zlakusa, not far from the centre of the village, elevated at the height of 365m. It is accessible from all directions. There are everyday bus lines, as well as possibility of arriving by train to Sevojno and then by bus.

3.2. The building process of ethno village "Terzica Avlija"

Ethno Park "Terzica Avlija", as a touristic household, represents one kind of an open and closed museum. Selection of the location itself is based on historical facts from the Second World War. It has been built as a sign of a respect and memory on old members of Terzic family who were taken from this yard and shot by Germans at the entrance of the village, where today is a monument as a reminder. We conclude that ethno village has its own story, based on historic facts, why it is established right there, contrasting ethno village Sirogojno, where there are not any similar historical facts.

3.3. General characteristics of ethno village "Terzica Avilija"

Ethno village "Terzica Avlija" consists of two old Serbian houses, which are made out of adobe brick. It has economic buildings. One house is adapted into a suit in ethno style, where visitors can stay overnight. In other house, which makes museum part, is rich collection of showpieces, as well as setting of a newlywed's room from the beginning of 20th century.

3.4. Advantages of ethno village "Terzica Avlija"

It gives an opportunity to organize seminars, art colonies, exhibitions and smaller celebrations. It is in the program of foreign tour-operators, mountain societies, and school excursions. International colony of ceramics is held in Zlakusa. Zlakusa is also a headquarters of association named "Zavicaj", which has over 100 members. It is the winner of "Touristic flower" award, given by TO Serbia, as the most successful village - touristic household in Serbia.









Officially, it has been open since 2005. It is visited by domestic, but also by foreign tourists from all over the world (Australia, Canada, the USA, Iran, Turkey, Russia, Israel...). Ethno Park "Terzica Avlija" has elements of modern, like newly built summer house and

Ethno Park "Terzica Avlija" has elements of modern, like newly built summer house and artificial spring with lakes, while in Sirogojno everything is in ethno style.

3.5. Lacks of ethno village "Terzica Avlija"

According to our own opinion, one of the lacks is that it is not open for visit through entire year, but only during the season, from April 1st until October 31st, but they have in plan to make it work over the whole year.

 Table 1: Comparative analysis of ethno village "Sirogojno" and ethno village "Terzica Avlija"

Ethno village "Sirogojno"	Ethno village "Terzica Avlija"
Open museum	Both open and closed museum
Wooden houses	Adobe brick houses
Ethno style	Ethno style with modern elements
Protected cultural heritage	Privately owned
Open for visits over the entire year	Work only during the season
Longer tradition	Shorter tradition

4. CONCLUSION

Ethno villages are more and more popular way of vacation, not only for domestic tourists, but also for many foreigners in need of peace and quiet. This region of Serbia is made for this kind of offer. Preserved natural resources and diversity of cultural and historical heritage represents junction of tradition and nature. Part of the tradition of this region is hospitality of local population which is in charge for pleasant atmosphere and comfort of stay. All ethno villages are created by those who understood in the right time what would be the principal of tourism in Serbia. Everybody invested a lot of love and imagination in order to show every characteristic of this area and hospitality. Disregarding the flaws, these ethno villages deserve praises for invested effort, love, money, as well as for courage to stay in the village where it is difficult to provide money. For all this, country should provide bigger support.

The goal of ethno villages is to preserve Serbian culture and tradition, as well as to bring more foreign guests who will improve development of the region and promote beauties of Serbia.

REFERENCES

- 1. Trumbulovic-Bujic Lj. (2013), Ekologija i turizam, VPTŠ Užice
- 2. http://bs.wikipedia.org/wiki/Eko_turizam
- 3. <u>www.lovetravel.rs</u>
- 4. <u>www.zlatibor.org.rs</u>
- 5. <u>http://www.etno-institut.co.rs/</u>
- 6. Etno-selo-Wikipedia
- 7. <u>http://en.wikipedia.org/wiki/Sirogojno</u>









MANAGEMENT OF TOURISM DEVELOPMENT IN THE MUNICIPALITY OF VISEGRAD

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Abstract: All relative sources indicate a high potential of tourism as an economic branch, even in conditions of global economic crisis, which was reflected on the area of the former Yugoslavia. That tourism potential is very noticeable in the municipality of Visegrad. In fact, a few years ago in the center of Visegrad, the construction of a tourist complex Andriégrad ("The city of Andric") has begun, a project of a great importance for the municipality as well as for the entire region in general and for the Serbian people. Andriégrad has already become a place of arrival of a large number of tourists, and along with the bridge on the river Drina, make Visegrad as an enviable tourist attraction. Development of tourism in this region had various ups and downs, but its management and joint planning was vital to appoint Visegrad as an important tourist destination today.

Key words: tourism, Višegrad, tourism destination, Andrićgrad, tourism development

1. INTRODUCTION

Tourism is a socio-economic phenomenon that experiences dynamic growth and development in the last few decades. This also largely contributes to the emergence of new tourist destinations in various parts of the world, and expanding the range of tourist attractions. In fact, with the rapid development of transportation, people are more active and more frequently change their place of residence, which basically is the definition of tourism. Through this work we will try to answer the question of what is necessary to manage the development of tourism at the level of a tourist destination. So, our hypothesis is based on the strategic approach as a key element for the successful development of tourism in some tourist destination. In order to obtain better and more detailed answer for our hypothesis, our research will be conducted on the bases of Visegrad as a tourist destination in the expansion.

2. TOURIST DESTINATION

According to the definition of the World Tourism Organization (UN WTO), tourism is the act of travel for the purpose of recreation, as well as the provision of services in order to achieve that purpose. The word "tourism" comes from the French word tour, which in translation means travel, sightseeing, tours. Accordingly, a tourist represents a person who travels at least eighty kilometers from the permanent residence in the purpose of recreation (WTO, 2014). Tourist destination is the physical space where tourists stay at least one night. Consequently, a tourist destination can be observed from several different perspectives. For example at the global level, Africa as a continent can represent a single tourist destination. On the other hand, more precisely, island like Sicily can be observed as a tourist destination. Also, one region as Zlatibor district or even a village, town, may









represent a tourist destination. All in all, we notice that term is not specifically defined and everything depends on our general perception of a tourist destination. Different perceptions of tourist destination consequently lead to different definitions, but general approach has to characterize one tourist destination dynamically in order to monitor its sudden expansion. The name a tourist destination comes from the Latin word "destinatio" which represents a destination or goal, while on the other hand, in the Anglo-Saxon literature represents the word "resort". In particular, definition of a tourist destination has many different varieties and each is true in its own way, so, for example, E. and M. Inskip Kalenberger define tourist destination as "a certain narrower or wider spatial unit which accounts for the tourist trade, and the unit may be every place that facilities tourist, as well as each region which houses several tourist centers." While on the other side, S. Holovej argues that "destination might be place for a vacation or business center which is visited by tourists and place where they reside. This may be one area or even the country within which they are traveling. This may be even cruise which during its travel visits several ports. The best definition for destination represent one or more places in which tourists come and stay, and movement" that signify the basic aim of their (http://sh.wikipedia.org/wiki/Turisti%C4%8Dka_destinacija). This means that a tourist destination is a place where the tourist traffic takes place, which on the other hand includes accommodation, food, recreation and other aspects of the offer. Accordingly, through our further analysis we will concentrate primarily on the Visegrad as an example of the tourist destinations in the positive expansion.

3. VISEGRAD AS A TOURIST DESTINATION

Year by year, Visegrad is becoming more and more interesting destination for tourists throughout Bosnia and Herzegovina and other countries in Balkan and Europe. This positive trend of tourism development in Visegrad is mostly due to creation of Andrićgrad, tourist complex formed at the place where Rzav River meets Drina. Andrićgrad is the creation of the great Serbian artist Emir Kusturica, whose idea was to bring Serbian history, architecture, art and culture at one place. As Kusturica used to say, "It practically merges from two periods - fragments of the Renaissance period with Ottoman and Byzantium. - At the entrance the caravanseral encounters with Byzantine court, and it will be below what it could if it was billed by Austria, which did not happen, and as the Ottoman Empire built what was supposed to build. Finally, towards the main square, which is a kind of classicism, which was supposed to occur during the kingdom between the two world wars, stands street with different parts of the Renaissance, which was expected to be made by Austria in a past, but as all above it did not happen" (http://www.visegradturizam.com/latinica/andricgrad). Except Andrićgrad, a wide variety of other tourist attractions can be found in Visegrad, such as the bridge of Mehmed Pasha Sokolovic from 1571, the Visegrad spa "Vilina Vlas", Drina River with stunning canyon and other natural and cultural treasures. Consequently, we should get back to the potentials of tourist actions of this tourist destination. It can be divided into two parts, internal and external touristic activities. Internal are related to infrastructural inner opening, and specific disposal regulations. This whole process can be viewed as a function of the internal capabilities of the municipality or of the destination, destination structure or specific measures (regulations) within the destination. Thus, the difference between: 1. Accommodation and food facilities, 2. Shops and Services, 3. Objects for entertainment and









culture, 4. Attractions, 5. Places of interest, 6. Landscapes availability, 7. Climate, weather, 8. Courtesy of population, 9. Agglomeration of people on vacation, and 10. Infrastructure (Dobre R., 2004).

According to this measures or, in other words, regulations, Visegrad has adequate possibility for internal tourism activities. First of all, the basic attraction which attracts tourists in Visegrad and make this destination different from others, are Andrićgrad and the famous "Bridge on Drina River". Furthermore, geographical location of Visegrad is very good, the town is located close to the border and crossroads between Serbia, Bosnia and Herzegovina and Montenegro. While, on the other hand, the economic distance or cost necessary to reach Visegrad are within normal limits according to the economic standard of this region. Transportation within the destination is also developed, starting from local roads to the railway and water transport, which are primarily made for tourists. Also, construction of Corridor 11, highway from Belgrade to Bar through Zlatibor is in progress, and this will also contribute a lot to Visegrad because it is close to Zlatibor and a highway itself. Moreover if we analyze the accommodation capacities of the town, Visegrad currently has hotels "Visegrad" and "Vilina Vlas" and a huge number of motels and private accommodation facilities. Also, a five-star hotel in Andriégrad is under construction, as well as two small hostels, and therefore the town will get significantly expanded number of tourist accommodation facilities. The town also has a number of good restaurants, which offer good local and international cuisine. The socio-cultural dimension of the town is diversified. The town has a range of different facilities for entertainment and culture, such as the House of Culture, Andric Institute, multiplex cinema, theater and other facilities. With a prosperous cultural expansion, even the attitude of local people toward tourism has changed in a positive direction, and today we find cordial and friendly people willing to welcome every tourist who comes to Visegrad. Nevertheless, it is important to note that this geographical region has a warm climate with pleasant summers and mild winters that are in favor to many people. The town alone lies on two artificial lakes that are navigable all the way, and it represents a great opportunity for development of nautical tourism. All these elements are related to the attractiveness of the destination alone. Moreover, accessibility and the conditions for residence are important for position of Visegrad at the tourist market, and only investments in their further development makes Visegrad more competitive and more desirable for tourists.

4. DYNAMICS OF TOURISM DEVELOPMENT IN VISEGRAD

By the time, every tourist destination goes through different phases (Chart 1), and this is reflected in the achieved number of overnight stays, accommodation facilities and other factors. Visegrad is very specific in this matter.

In the '80s of the last century the city was well developed and a well known tourist destination. There were the hotels Bikavac and Visegrad whose capacities were almost constantly full. The city is located in a halfway of the famous road at that time Belgrade - Dubrovnik, and served as the main resort for most tourists along the way. Besides that, at that time various events and trips in Visegrad were organized, and at the same time Ivo Andric was writing his famous novel "The bridge over Drina", for which he has been awarded the Nobel Prize, spreading the news about the existence of Visegrad worldwide. The glory of the time is witnessed by the famous songs about the beauty of Visegrad that were sung throughout the former Yugoslavia. With the advent of the war in this region, the









entire infrastructure was destroyed and tourism in Visegrad almost disappeared. In the last few years, some important projects for the re-establishment of Visegrad as an attractive tourist destination have been implemented. First of them, the opening of the narrow gauge railway where runs the legendary train on coal "Ciro", the renewing of the Dobrun monastery, then the boats started to cruise over Visegrad lakes, hunting and fishing tourism were developed, and the most important, the construction of Andrićgrad. The world's famous artist Emir Kusturica settled in Visegrad, and with the construction of Andrićgrad, he wants to promote



Chart 1. Life cycle of a tourist destination

culture, art and history all in one, which he's doing good because Andrićgrad is getting more and more publicity. The number of tourists is growing rapidly every year and this contributes to the development of mass tourism in Visegrad. So if we look at the model of the life cycle of tourist destination we can identify four development stages: the pre-tourist phase, the travel phase, the development of mass tourism phase and the final phase of tourism management. Visegrad is currently in the process of institutionalization and development of tourism and is on track to turn into a successful tourist destination. Although, if we look throughout the history, we will notice that this model, which is used by most of the tourist destinations, is irregular and difficult to apply in Visegrad.

5. MANAGING TOURISM DEVELOPMENT

The tourist market is a relatively young market, and tourism as an economic branch has seen a great expansion only at the end of the last century. The most meritorious mean to manage the development of tourism is marketing, because as much as a touristic destination is attractive, if no one has heard about it and its quality then there is no prosperity. So, marketing in tourism is defined as the coordinated activity of the carriers of business and tourism policy in order to satisfy the needs of a selected optimal/target market segments with the achievement of maximum economic impact respecting the influence of





the social and natural environment and achieving an adequate quality of life (Vujić T., 2008). In order to successfully manage the tourism development of a destination, first we must perform an analysis of internal and external factors that determine which offer and attractions the destination disposes. Next, it is important to define a clear strategy and objectives, and with the help of marketing as the main initiator of development and other factors, to commence the realization of these goals.







For example Visegrad could make a longer program with a rich tourist offer through establishing the cooperation with national park "Tara" and the park of nature Mokra Gora. This would increase the number of nights and connect together an area from Mokra Gora and a tour with the old train till Visegrad, a sightseeing of Visegrad attractions, a boat trip through the canyon of the Drina up to the national park "Tara", a stay in the nature and back to Mokra Gora with the visit of Drvengrad. Through the chart shown below we can see marketing management of a tourist destination and apply it concretely to manage tourism development in Visegrad.









In fact, we have already explained most of the things through our work. It only remains to establish the organization and the final inspection of the tourist destinations. A touristic organization at the municipal level in Visegrad already exists, and it represents the promoter of the tourism of Visegrad, while on the other side there's a plan to establish a touristic organization of Andriégrad, which will represent the main initiator of the tourism in this tourist complex. As the general auditor and controller for the managing of the development of tourism in a wider aspect, we can find the tourist organization of the touristic destination belongs to the touristic offer of the Republic of Srpska. Whatever, the satisfaction of the tourists' needs and the capability of routing its own development is the basis for the strategic development of tourism.

6. CONCLUSION

We have seen that the term 'tourist destination' is not concretely defined and depends upon our own perceptions. Specifically, in this paper we analyzed Visegrad as a tourist destination and we concluded that it has a high potential for even a greater touristic expansion, and with the ultimate goal to achieve a mass tourism in these area. We also found that the management of tourism development depends on many different factors, both internal and external, and that the destination in the municipality has to work together with the government if it wants to maintain the continuity of the development of tourism. In the end we found the answer to our hypothesis that for the successful development of some of the tourist destinations, including Visegrad, a strategic approach and a good organization of the resources are necessary. We have come through the analysis of the Andrićgrad project and of the tourism in Visegrad, which is strategically tailored for the purpose of popularizing tourism in this destination. It is also strengthened by the full exploitation of the natural resources of this destination such as rivers, lakes and mountains for the purpose of maximizing profits and increasing the number of tourists. This would be an achievable strategy for the tourism development of Visegrad, as well as any other destination, if it will be supported jointly by the municipality, the state and all the individuals who are directly or indirectly related to that destination.

REFERENCES

- 1. Vujić, T. (2008), Improving market performance of destinations in order to conduct more effective tourism policy, Institute of Economics, Belgrade
- 2. Košić, K. (2012), The management of tourist destinations, Institute of Economics, N. Sad
- Dobre, R. (2004), Management of tourist destinations, College of Tourism Management, Sibenik, <u>http://www.vus.hr/Nastavni%20materijali/Men.%20tur.%20destinacija/Menadzment</u> tu risticke destinacije skripta.pdf
- 4. World Tourism Organization, 2014, http://www.wto.org/english/tratop_e/serv_e/tourism_e/tourism_e.htm
- 5. <u>http://sh.wikipedia.org/wiki/Turisti%C4%8Dka_destinacija</u>
- 6. <u>http://www.visegradturizam.com/latinica/andricgrad</u>
- 7. Andrićgrad, 2014, <u>http://www.andricgrad.com/</u>









SPECIFICS OF CURRENT PROGRAM OF SPECIAL HOSPITAL CIGOTA IN CLIMATE AND TOURISTIC CENTER ZLATIBOR

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Abstract: Zlatibor is a mountain in south-west Serbia and one of the biggest and most visited touristic centers. Here, visitors can enjoy a diverse touristic offer. What distinguishes Zlatibor from other mountains is a specific climate, because right here a "wind rose" emerges and encounter of continental and Mediterranean influences occur, so this space is considered as an air spa, convenient for treatment of various diseases or maintaining health and condition of healthy people. This work analyzes the program content of Special Hospital "Cigota" located at Zlatibor, which is designed for different groups of users. Health tourism is significant type of tourism of this mountain, which is one of the reasons why Tourist Organization Zlatibor as well as the local government should be dedicated to preservation of this form of tourism.

Key words: Zlatibor, climate, tourism, healing, Special Hospital "Cigota".

1. INTRODUCTION

Large wavy plateau of Zlatibor is situated in the south-western part of Serbia, elevated on height between 700m and 1500m, 235km from Belgrade, near Uzice and Cajetina. The highest peaks are Tornik (1496m) and Cigota (1422m). Because of specific climate and characteristic air currents, continental and Mediterranean, which can be found only here, lush nature, unpolluted air, healthy and clean water, great number of sunny days during the year, cordiality of hosts, beautiful ski fields, Zlatibor turned into a famous summer and winter tourist center. Arrival of the King Aleksandar Obrenovic on Kulasevac in 1893 is considered as official beginning of tourism at Zlatibor, that is when the region got the name "The King's Waters". Since then, expansion of tourism has begun and many politicians, rich merchants, healthy or sick came to rest or get healthy. Travelling as a way of health tourism started with the goal of maintaining, stabilizing health, by using natural curable factors, medical services, recreational and wellness contents outside permanent place of living.

Statistics of Tourist Organization of Zlatibor show that Zlatibor every year, as well as 2013, is visited by more than 250.000 tourists, with more than 1.200.000 overnight stays. Ending with 2013, Zlatibor possesses more than 15.000 accommodation capacities of high category, with 4.000 of them in hotels and resorts, rest of them are in boarding houses, private villas and vacation houses.

Firstly, Zlatibor is a center of health tourism, for its clean and dry air, low air pressure. Temperate climate of Zlatibor made it one of air spas of Serbia, and it is convenient for









treatment of thyroid glands, asthma, anemia, metabolism diseases, cardiovascular disorders, nerve tension.

Treatment is conducted by staying in specific climate conditions of Zlatibor, under control of experts, and with the latest diagnostic, treatment and rehab equipment of Special Hospital "Cigota" for thyroid and metabolism diseases.

Special hospital deals with complete diagnostic and therapy for thyroid diseases, diagnostic and therapy for cardiovascular diseases, diagnostic of osteoporosis, therapy of children's and adolescent obesity, diagnostic and therapy for skeleton system.

2. SPECIFICITY OF THE CURRENT PROGRAM OF SPECIAL HOSPITAL "CIGOTA" IN CLIMATE AND TOURISTIC CENTER ZLATIBOR

Zlatibor is the mountain in the south-western Serbia; half way between Novi Sad and Montenegro coast, and due to that fact, Zlatibor has advantageous touristic-geographic position. The mountain is characterized by specific climate, since right here "wind rose" is created and encounter of continental and Mediterranean influence occurs, which makes this area an air spa.

Zlatibor is intersected by rivers and springs, rich with various kinds of fish. There are two artificial lakes on Zlatibor. The bigger one is in Ribnica, on Crni Rzav River. In the very center of touristic resort Zlatibor, there is a smaller lake, made for tourist needs. Zlatibor is famous as a ski center.

On Zlatibor, visitors can stroll; enjoy climbing, cycling or tour in the immediate environment. Stopic's cave, "Old Village" in Sirogojno, National park Tara, Mecavnik with Drvengrad, canyon of the River Uvac, Visegrad and Sarajevo are just some of offered destinations. During the entire year, on this mountain numerous manifestations are held.

During the whole year, Zlatibor is the place for training of best athletes, but also for basketball camps, paragliding schools, tennis, skiing and swimming.

2.1. Special hospital "Cigota" Zlatibor

The idea for building of a healing center on Zlatibor appeared at the end of nineteenth century, but it was implemented in the second half of the twentieth century. Locality of Zlatibor was chosen on the basis of the study, done by the team of experts: physicians, climatologists, architects. The results of treatments were incomparably better then the previous entirely drug – based treatments, so Special Hospital "Cigota" became a unique center for treatment of diseases of thyroid glands in the Balkans.

Medical center "Cigota" is located in the center of Zlatibor, surrounded by pine forest at the 1000m above sea level. Basic activity is the offer of medical services in the fields of endocrinology, nuclear and physical medicine, but it is also famous for its well known program for regulating weight, CIGOTA PROGRAM. Special hospital "Cigota" provides the following services: examination of doctors: endocrinologist, cardiologist, gastroenterologist, physician, psychiatrist; examination of a specialist: doctors of nuclear medicine, internist, physician; ultrasonography of thyroid gland; ultrasound of abdomen.









The facility has 360 beds in 30 suites, 67 single – bed, 79 two –bed, 9 three-bed bedrooms, 2 bedrooms for four and adequate restaurant space, which consists of the main restaurant for 370, exclusive restaurant for 150 and aperitif bar for 90 people.



Picture1. Special hospital "Cigota" Zlatibor

2.2. Cigota Program

Cigota is popular weight management and recreational program which helps its users, during their stay on Zlatibor, to get rid of excess weight, to rest, get in shape, and most importantly – to learn to live differently – actively and healthy.

For 20 years, "Cigota" program successfully deals with obesity and related diseases. Cigota program achieves its goal: reducing the devastating impact of obesity.

"Cigota" program includes: well-balanced dietary plan, program of physical activity, creating of group, positive atmosphere and basic briefing of significance of regular diet and recreation.

Team for implementation of "Cigota" program is consisted of: nutritionist, professors of sports, nurses, physiotherapist, and animators.

2.2.1. Little Cigota program

Association of Pediatricians of Serbia and Special hospital "Cigota", having in mind the importance of obesity problem, and the fact that frequency, according to the UNICEF data, amounts 15% in Serbia with children under 5 years, suggested to the Ministry of Health and Republic Institute for Health Insurance realization of the project "Prevention and








treatment of obesity for children and adolescents", which was accepted and financially supported immediately by the Ministry.

For performing the duties in the Center they have engaged: specialist pediatrician, specialist of physical medicine, 6 nurses, higher medical technician, three professors for physical education and other workers.

2.2.2. Beauty program Citoga

Beauty program Citoga includes: facial treatments, manicure, pedicure, waxing, solarium.

2.2.3. Wellness program Cigota

Wellness program Cigota includes: manager program, anti - cellulite program, thyroid gland program. Hotel offers ideal condition for rich recreational vacation (indoor swimming pool, fitness hall, gym and outdoor sports field for small sports).

2.3. Cigota diet

Diet treatment "Cigota" program includes well-balanced plan of daily intake of food. It is hypo energetic diet (960-1500kcal), but from the health perspective balanced, contains proteins, complex carbohydrates, vitamins and minerals, it is impoverished with simple sugars, fats, and unnecessary use of salt.

Cigota diet is not a diet which lasts 7, 14, or 21 days, it is a principle of regular diet for whole life. With the change of life attitude towards physical activity and diet, getting rid of bad habits, lost kilograms does not return. The word "diet" associate hunger and renunciation of food, but that does not have to be the case. There are 5 meals a day, every 3 hours, 3 main meals, and 2 fruit snacks. The bases of this diet are: fruit, vegetables, pumpernickel and whole grains. Source of quality proteins are lean meat, albumen, and low fat cheese. Sugars from fruit are the only "sweets" you enjoy here.

2.4. Attendance of Special hospital "Cigota" Zlatibor in previous 2013

Special hospital "Cigota" in 2013 was visited by 8.411 guests (Chart 1). Total number of overnight stays: 57 365.











Chart 1: Guest structure of Special hospital "Cigota" in 2013.

Picture 2. Hotel "Mona" Spa and Wellness

3. CONCLUSION

The climate and tourist center Zlatibor is visited by over 250.000 tourists a year, 40% of them for health reasons. Presented data clearly indicate that the health tourism is extremely important way of tourism for this mountain. It is one reason more to pay more attention to the fostering of this way of tourism.

For further development of health tourism, it is needed to build one more Special hospital, or to expand or renovate the existing one - "Cigota".

In order to keep the status of an air spa, the level of soot at Zlatibor must be below the minimal. It is also favorable to display information about the soot in front of the hotel "Mona" along with the information about the weather, date, current air temperature, UV radiation... (Picture 2).

Zlatibor, with its versatile offer, is in the very top of Serbian spa tourism. Current offer can be complemented through satisfaction of current needs of consumers, such is the need for









organic food. Investors who recognized current need for healthy food are observable; one of them is Hemel Resort.

Great number of hotels in Zlatibor successfully follows the trend of health tourism, so they have completed their offer with Spa and Wellness centers.

REFERENCES

- 1. Novakovic-Kostic, R. (2012), Nacionalna geografija, Uzice
- 2. Rabotic V. (2012), Selektivni oblici turizma, Beograd
- 3. <u>www.cigota.rs</u>
- 4. <u>www.zlatibor.rs</u>
- 5. <u>www.topsrbija.com</u>
- 6. <u>www.linkserbia.com</u>
- 7. <u>http://banjeusrbiji.com/vazdusne-banje-srbije/</u>









CHARACTERISTICS OF DIFFERENT TYPES OF ADVENTURE TOURISM AND GUIDELINES FOR ITS DEVELOPMENT

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Abstract: The subject of this paper is study of the concept and characteristics of adventure tourism, analyzing its types and connection with other sectors and types of tourism. In this paper, in addition to the description of certain types of adventure tourism, its features and basic characteristics, and comparison of attractiveness and organization of adventure tourism worldwide and in our country, the opportunities that this type of tourism brings with it and which may contribute to tourism and economic development of areas where practiced are also presented, as well as guidelines that may lead to the development and improvement of all forms of adventure tourism in the country and the region of Western Serbia.

Key Words: adventure, tourism, adventure tourism

1. INTRODUCTION

We have witnessed extreme sports, and therefore trips to adventure travels around the world and in our country are becoming increasingly popular. Huge human curiosity and desire to explore led, first of all, to long and dangerous, often deadly journeys and explorations, and then to combining the existing sports and disciplines with new ideas and the human urge for nature and wildlife.

If we start to analyze human history and to explore the people who started the adventure travels, it is sure that the beginning would have been as long as historical development of man himself.

Vikings, Marco Polo, Vasco da Gama, Magellan, Columbus, many explorers of the West and North America, Siberia, Africa, South America, Australia and New Zealand, Antarctica and the Arctic, and many other regions on Earth have become famous for their adventurism, they were the first where no man has been before them, while the others, those who visited the same places later are rarely remembered.

Our country, and so the region of Western Serbia, due to its attractive terrain, and nature, had always attracted explorers, visitors, and from the very beginnings of adventurism, the adventurers themselves.

The construction of the road network and the railway contributed to the fact that once wild and inaccessible parts of the country, and first of all the Southwest, became available and accessible. With the infrastructure development, the tourists and the adventurers were given the opportunity to arrive at the centers in the vicinity of wild, untouched areas where nature is almost, or entirely unharmed, and which represent a sort of paradise for adventurers.









Adventure tourism is highly associated with a variety of types of tourism, first of all with the sport tourism which, through extreme sports, today, the most popular type of adventurism, provides almost unlimited opportunities for development and attracting of tourists, followed by rural tourism, which in these parts begins to develop the `70s, increasingly popular eco-tourism, and its subsidiaries, hunting and fishing tourism.

2. ADVENTURE TOURISM

Adventure tourism is a form of tourism which includes traveling to the harsh and unexplored areas, or extreme sports (Karadžić M., Prodanović M., 2009).

- Adventure tourism is a type of tourism that takes place in natural environment.
- It focuses on activities in nature and involves physical challenge.
- There are 3 types of adventure tourism (Karadžić M., Prodanović M., 2009):
 - 1. small scale, with a lot of elements of ecotourism (bird watching),
 - 2. medium scale (rafting),
 - 3. large scale, with aspects of mass tourism (safari).

Subdivided into soft (low level of risk) and hard (high level of risk for all participants), the adventure tourism is a type of tourism of specific or special interest, and may be any of tourist activity that includes two of the following three components (Karadžić M., Prodanović M., 2009):

- Physical Activity
- Cultural exchange or interaction
- Contact with nature

Leisure, tourism and recreational needs are becoming increasingly important component in the daily lives of people, who are increasingly looking for emotional stimulus, demanding ambiance, and aesthetics. Adventure tourism is becoming increasingly popular in the world; it has a positive impact on people, the environment and economic growth. There is increased number of tourist destinations that want to develop exactly this type of tourism, and therefore there is a need to set principles that can serve as guidelines for sustainable development (Rabotić B., 2012).

2.1. Tourism of specific or particular interests

New trends in the tourism market have contributed to the occurrence of specific forms of tourism (tourism of particular interests) that differ from mass tourism that there is a focus on new forms of tourism that have the potential to satisfy the needs of tourists and hosts, including adventure tourism, nature-based tourism, rural, cultural, tourism based on heritage and events (Anić T., 2009).

The basis of development of adventure tourism is a wealth of natural resources and favorable geographical position. It is a type of tourism that can initially be developed because it does not require large investments, and with well-designed development strategy Serbia would be positioned as a new destination with a rich and diverse offer in the international market of adventure tourism (<u>turizamusrbiji.rs</u>).









3. EXTREME ADVENTURISM

Extreme adventure is a young branch of tourism, global developed in the last 20 years, but with some branches that spread since the late '60s.

One of the first extreme sports is surfing, which began to develop as a sport on the US West Coast and the east coast of Australia. Since it was too long to wait from summer to summer, surfers from the western coast of the United States went to the famous winter resorts in the Rocky Mountains and made a snowboard, the late seventies and early eighties (Karadžić M., Prodanović M., 2009).

Unlike conventional sports, extreme sports rival is not another person, but a force of nature or an obstacle, for which overcome is needed, besides persistence, good mastery of a specific skill and great courage. Basically they are individual and they take place in a natural environment.

Towards space in which they take place there are extreme sports on land, water and air.

They can be divided as competitive and non-competitive, as well as winter and summer.

Some of the best and most popular disciplines of extreme adventurism are paragliding, gliding, bungee jumping, air surfing air, rafting, and kayaking the waters of the fifth category - the so-called white waters, kayaking through the jungle and over the waterfall, diving with sharks, on the coral reefs, or looking for treasure, surfing, kite surfing, surfing on the river, ice climbing, free rock climbing, riding a board on the rugged peaks, chasing tornadoes.

3.1. Alpinism

If one sentence defines alpinism, then it would be - an extreme form of mountain climbing. Alpinists are also mountaineers.

The difference between an ordinary mountaineers and alpinists is is that the alpinists climb from more difficult side to reach the top. The harder conditions are, the success is higher. Besides the usual mountaineering equipment, the alpinists use a specialized: rope, carabiner, belt, hammer, pins, the wrist, and many more.

3.2. Ice climbing

Climbing on the frozen waterfalls, the challenge for the most daring ones is one of the most extreme types of alpinism that requires special technique and equipment.

Popular Ice climbing represents the overcoming of the ice surface (icy slopes and cliffs, frozen waterfalls) and requires special skills of climbers, strict observance of the rules and equipment that differ from the equipment for the other forms of climbing. Ice climbing necessarily involves the usage of studs and hammer frozen form.









3.3. Free climbing

Over time, the need for the defining of new discipline within climbing has emerged, for many reasons. The main reason for that was the appearance of men who wanted to climb the rock only, to have the smallest possible access, not to have technical issues in the rocks, such as poor or no insurance, the desire for a high probability of falling. That discipline is called Free Climbing. This discipline has made good progress in a short time and climbers have started taking climbings, which were unthinkable until then. Free Climbing is reflected in the fact that it uses much less equipment than the alpinism, it is practiced only in the dry rock, so far, mostly in good weather conditions, which is logical considering the difficulty of this form of climbing.

3.4. Mountain bike

Mountain bike is a sport that belongs to a group of extreme sports that carries a lot of adrenaline. Considering the mountainous terrain in our country, with lot of plains and hills, this sport is becoming increasingly popular in Serbia. A large number of participants are competing in MTB Championships Serbia. A group of about a hundred people, mostly fans of the sport, are organized in ten MTB clubs. Through touring races all over Serbia, which are rated for MTB League Serbia, they socialize, compete and promote the sport and a healthy lifestyle (http://www.explore-serbia.rs/).

MTB clubs in our country are: Baunti - Kraljevo, Ris cycling, Fanatik - Novi Sad, Bela stena - Kruševac, Radnički - Kragujevac, Kaprilolo - Bačka Topola, PBD Orlovac - Crna Trava, HT Leskovac - Leskovac, Agresiv - Ruma

3.5. Orienteering

Orienteering is a sport in which a participant receives a map showing marked controls that should be found for as short time as possible in the order given on the map, with help of compass. The special maps with specific labels for objects on the ground and a special meaning for the colors are used in orienteering. There are several disciplines of orienteering such as: mountain orienteering, ski orienteering and mountain bike orienteering.

3.6. Snowboarding

Snowboarding is a challenge and a synonym for driving in deep snow and rough trails. Snowboarding is probably the most popular winter activity including those that can be considered an extreme sport. Today it is recognized as a sport full of attractions. Some of the types of snowboarding are free-ride, reestyle, and free-crave.

3.7. Rafting

Rafting is lowering on more or less wild rivers in a rubber boat called a raft. It can be practiced competitive and recreational. Rafting on the wild waters is becoming more common because it is not necessary to be an athlete or even a good rower for active









participation. Rafting trips are suitable for everyone and do not require prior knowledge of paddling, in the case of raft operated by experienced rafter, and others just listen and carry out his instructions. Besides being a sport and recreation, rafting is also a movement for the preservation of rivers and nature in general. Another extreme and Olympic sport that can be practiced on our wild and flat water is kayaking.

3.8. Water jumps

Two basic disciplines: jumping from a springboard and jumping from the tower. Jumps from springboards are performed from the elastic board from a height of 1 m to 3 m above the water surface.

The tower is solid, usually concrete or wooden take-off at a height of 5 to 10 m above the water. "Two seconds for a jump from the tower last as eternity". In addition to the strict form of the Olympic water jumps the particularly attractive are jumps from high rocks, cliffs, bridges.



Picture 1: Types of adventure tourism 1. Alpinism; 2. Ice climbing; 3. Free climbing; 4. Mountain bike; 5. Orienteering; 6. Snowboarding; 7. Kayaking; 8. Rafting; 9. Water jumps; 10. Paragliding; 11. BASE jumps; 12. Canyoning.









3.9. Paragliding

Paragliding is a free-flying above the magical landscapes. Experiencing dimensions on which people have always dreamed makes this sport particularly attractive. Aircraft runed by pilot legs are controlled by the soft wings which shape is formed by air pressure. Wing span is 8-12 meters.

3.10. BASE jumps

BASE jumping is definitely one of the most extreme sports today, and the most important thing in all is to open the parachute on time. T most popular jump nowadays are from the highest skyscrapers in the world, such as towers in Kuala Lumpur. The main difference between skydiving and BASE jumping is that the altitude provides security in the parachute world, while at the BASE the security is rejected. That's why BASE brings incredible adrenaline shock, but such an addiction after a single jump.

3.11. Canyoning

Canyoning is an adventurous sport that is practiced in the waters of vertical canyons, natural pools, whirlpools, rapids and waterfalls. The very look at this sight makes it a unique experience. Since it does not require great physical preparation, canyoning has evolved rapidly as a sport and entertainment. Around the world, it has been shown that it can be practiced by everyone. Since the equipment used rope that is placed on waterfalls, carabiners, harnesses, helmet and wetsuit that is required most cases.

4. CONCLUSION

Based on the foregoing it can be concluded that Serbia has a very high potential for adventure tourism. The listed types of adventure tourism can be highly present in the tourism offer of our country, and especially the region of Western Serbia.

There are areas in our country with great potential for development of adventure tourism which, was almost not used at all, so far. The wild, untamed scenery of Western Serbia, canyons and caves of mountains of Valjevo, extraordinary relief of southwestern mountain ranges, Zlatibor, Tara and Zlatar with all its fabulous landscapes, remarkable preservation of nature, trails suitable for trekking and mountain biking, from wild rivers of Drina, Lim and Rzav, extremely convenient and underutilized for extreme water sports, canyons of Uvac and Rzav, to the unreal lookouts of Zlatar, Tara and Golija.

There are associations and extreme sports clubs consisting of many enthusiasts in Zlatibor area. They actively participate in the promotion of adventurism in this region.

Most of the hiking and rafting clubs, and a variety of hunting and fishing associations in all the municipalities of Western Serbia, then cycling associations and several equestrian clubs. Some of the most outstanding in work and commitment are Extreme Sports Club "Tifran" and rafting clubs "Kolovrat" and "Era, then mountaineering association "Palanka",









"Zlatibor", "Maljen", "Rujno", "Tara", "Omorika" and "Kamena Gora", cycling clubs, "Merks" and "Ciklon" and equestrian clubs "Dora" and "Farma" (<u>http://www.wildserbia.com/</u>).

Western Serbia, in addition to the unexplored and untouched parts of eastern Serbia, is certainly the greatest pearl of our country, and with its terrain, weather and geomorphology it is an ideal region for the adventure tourism.

In the past few years, the adventurous events can be found in the tourist brochures, events organized in Zlatibor area, such as, Drina rafting, Rzav rafting and canyoning, jumps from the old railway bridge into Djetinja river, or the increasingly popular Rzav jumps, on Urjak beach, bird watching and orienteering in the woods and mountain trails, mountain bike competition, but it's all still insufficiently developed and advertised.

The conclusion is that our country, especially the region of Western Serbia, must, in addition to rural and medical tourism, emphasis the adventure tourism, branch of tourism, which can potentially be the most popular, attract large numbers of tourists and bring economic growth.

Guidelines for the development and promotion of adventure tourism in the region of Western Serbia would be to maximize the Belgrade-Bar railway and road network, led by the main road Belgrade-South Adriatic, in order to attract as many tourists, and also to consider options that will bring the announced construction of a highway over Požega-Sjenica-Pešter Zlatar to the seaside.

As for the locations that represent the core of adventurous attractions of our area, the priority would be to build the appropriate infrastructure, or improve the existing one. To mark mountain trails, trekking and biking trails, the fields, set up signs and signposts. A large number of springs, waterfalls, lookouts, glades, and paths, remains unknown, even to the local population, because of impassability, inaccessibility, and the absence of markings.

Therefore, the priority must be the complete markings of trails and terrain, setting-up lookouts, and construction of appropriate facilities and the fences, adaptation of existing hunting and mountain huts and other similar facilities and construction of new ones, in order to adventurers can spend the night or stay in an authentic environment if they want to.

Set up road signs towards places suitable for rafting, kayaking, canyoning, and other water sports on our wild rivers, Mark areas suitable for setting up camp.

Also, the necessary thing to do is to actively involve local people in the tourism sector, with its complementary activities, crafts, cuisine, to make a good relationship with local farms so the tourists, in addition to adventurism, could enjoy the rural tourism.

To include hunting and fishing clubs to participate actively by organizing various events, such as cooking fish soups, stews and other specialties of fish and wildlife, which could be very interesting to the adventurers, as well as to all the other tourists, Enhance manifestation tourism by organizing meetings and gatherings of members of extreme sports clubs, hunting and fishing associations, organizing gastronomic, cultural and artistic programs. After all this, it is necessary to do good promotion of existing content, to advertise it well, and actively promote it through all available channels of promotion.









REFERENCES

- 1. Rabotić B. (2012), Selective forms of tourism, The College of Tourism, Belgrade
- 2. Adventurers club "Wild Serbia", Valjevo, Serbia, http://www.wildserbia.com/
- 3. Association of adventure lovers "Explore Serbia", http://www.explore-serbia.rs/
- 4. Web portal "Tourism in Serbia", <u>www.turizamusrbiji.rs</u>
- 5. Anić T. (2009), Specific forms of special interest tourism in the example of South East and South West Serbia, master paper, Singidunum University, Belgrade
- 6. Karadžić M., Prodanović M., (2009), Adventure tourism, Faculty of Economics, Subotica









NATURAL AND ANTHROPOGENIC CONTENTS WITH DEVELOPMENT STRATEGY OF TOURISM OFFER OF ZLATAR MOUNTAIN

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Abstract: This paper presents the state of tourism at Zlatar Mountain, opportunities for the development of different forms of tourism and plans for the future. It describes the tourist and geographical location of Zlatar Mountain, natural, geo-morphological, hydrological and bio-geographical tourist values, anthropogenic tourist resources, tourism receptive factors, the development of the tourism offer and outreach strategy in the tourism market. Zlatar area has excellent conditions for development of tourism in the countryside.

First of all, it's particularly favorable conditions of preserved nature, with a mild climate, clean air, unpolluted rivers and lakes, rich flora and fauna and a rich historical and cultural heritage of this region. Stay in nature gives tourists the opportunity for walking, recreation, sports, organized excursions to the nearby river canyon Uvac, pools and lakes, go hunting and fishing, horseback riding, hiking, picking berries and herbs, and other recreational and entertaining activities in the nature. A large number of villages are located in the vicinity of valuable cultural and historical monuments, churches and monasteries that tourists can visit. The buildings of traditional architecture, with the characteristics of this area, as well as the products of traditional crafts and handicrafts, through which the rich heritage of our nation is introduced, have exceptional cultural value. It is also possible to visit various exhibitions that are organized in the region, as well as tourist events and traditional events through which the traditional customs and characteristics of rural life are introduced. This diversity of tourism resources and wealth of cultural heritage are especially enriched also by prominent hospitality and warmth of the local population, which welcomes every tourist as a friend. Recently declared a health resort, the mountain with the 2000 sunny hours per year is a real factory of red blood cells and very suitable for the development of sports, recreational, healthcare, culinary, hunting and rural tourism. However, the greatest asset of Zlatar certainly is its people, proud and warm highlanders, who have preserved their customs, legends and true values to this day.

Key words: Zlatar, Nova Varoš, Uvac, griffon vulture, tourism

1. INTRODUCTION

At the tourist demand side, the trend of the individualization of requests and the orientation to a "special interests" is more and more actual, where particular chance is given to the tourism in the country side. Underdeveloped rural areas, which are based on traditional agricultural small-scale production, are more attractive for tourists. Zlatar Mountain is a bit neglected in the tourist market. Staying every summer on the mountain, I am familiar with all its beauty and opportunities for active vacation. Insufficient tourism development of









this destination is one of the reasons that led me to choose this topic. This paper aims to point out all the natural and anthropogenic tourist values and opportunities that this area provides for the development of specific forms of tourism. This work should be not only a kind of propaganda material, but also an invitation to all lovers of nature and cultural heritage to embark on a new adventure in unexplored areas and thus expand their horizons and enjoy the benefits of nature. Tourism as a major industry in modern society has excellent conditions to develop here and through complete tourist offer meet the needs of potential foreign and domestic tourists. The aim of this study is to make reader interested for the tourist potential of Zlatar Mountain, to promote and encourage the development of tourism, provide information on everything the destination has to offer. It points to the difficulties and problems that arise in the development and promotion of tourism and how to solve them more efficiently.

2. NATURAL TOURIST VALUES OF ZLATAR MOUNTAIN

Zlatar belongs to a group of mountains in southwest Serbia. It has Dinaric direction and it is located between Uvac to the east and Lim to the west, to the north, it is bordering the river Bistrica and in the south Mileševska river. The highest and most prominent part of Zlatar lies to Bistrica and Nova Varoš. It starts with Bitovik (1371m) in the northwest, and through Crni Vrh (1382m) and Klik (1411m) climbs to Golo Brdo (1627m) the highest peak of Zlatar. It descends from Golo Brdo through Sirovi kraj (1479m), Orlovača (1431M) and Bulatović (1419m) down to Zlatarsko brdo (1389m). "Tourist geographical position of Zlatar has significantly been devalued by relative proximity of motifs of same kind but very attractive ones" (Dinić G., 2011). These are Zlatibor and Tara, but there are also Golija and Pešter and a bit further Montenegrin mountains, as well.

2.1. Geomorphological tourist values

Zlatar belongs to Dinara Mountains where have been developed the following genetic types of terrain: tectonic, fluvial-denundation, paleoabrasive and karstic. From the south and southeast area it is limited with tectonic windows of Aljinović and Goračić. Valley of Nova Varoš was formed by a system of cleavages, east-west. The smaller valley is Negbin vale, and major valleys in the region are Priboj and Prijepolje valley. On its release from Sjenica valley Uvac receives Vapa river, then enter the canyon 12 km long. It continues along the ravines valley in which the lakes Uvac, Zlatarsko and Radoinjsko had been formed. The canyon cliffs are inhabited by an extremely rare bird species-griffon vulture, and so for the habitat of rare species, geomorphological rarity of the canyon, a series of caves in this part of the valley the rich landscape, part of canyon valley Uvac have been placed under state protection as a nature reserve. Surface karst forms to be found are valleys and coves , and the underground ones are pits and caves. Uvac cave system is 6185m long. Caves are very rich in cave ornaments in the form of stalactites, stalagmites, draperies (http://www.novavaros.com/).









2.2. Hydrographic tourist values

Tourist Geography uses the results of hydrological research, because the water as the basis of life, at the same time is also the basis of occurrence and development of many kinds of tourism and transport for tourism. Among hydrographic objects in terms of tourist value, the most significant are lakes, rivers and springs. These may be categorized into independent and complementary tourist values and provide basic physiognomy of the area.

2.2.1. Rivers

Rivers of Zlatar belong the Black Sea basin. In the hydrographic network of Zlatar are noted following rivers Uvac, Lim and Bistrica as larger ones and Zlatar river Mileševska river, Duboko Dolski stream, river Kosatička, Lošnica of the smaller waterways. The backbone of the hydrographic network of Zlatar is a river Uvac length of 119 km and a basin area of 1334 km2. It has distinct character of the mountain river in a phase of active erosion. It has significant energetic potential, and so on its course were built three hydropower plants for which there were created three artificial lakes: Uvac Zlatarsko and Radoinjsko.

2.2.2. Lakes

The lack of documentary material on the air temperature, sunshine, rainfall, amount and duration of snow cover, clouds and winds, water temperature is a particular difficulty in making the best of conclusions and concrete proposals for the major tourism development in artificial lakes. At the lake there is no service registration number of tourists and tourism traffic. The lake Uvac was created by construction of a dam upstream of Zlatar lake, between the villages of Akmačići and Bukovik. Behind the dam was created an artificial lake, the surface of 6.10 km2 and a depth of 100m. This lake largest artificial lake in Serbia after Vlasina lake. The low temperature of the lake water negatively affect the bathing season. The altitude of Zlatar lake is 880 m. The maximum depth reaches 75 m. In summer bathing is possible on Zlatar lake , but for the development of spa tourism so far nothing has been done. Such a situation adversely affects the possibility of development of fishing and tourism. Radoinjsko lake is located downstream of the Zlatar, 11 km long, maximum depth of 30 m. It was created by damming the river Uvac 43 km upstream from the confluence of Lim. During warm and sunny summer days the water temperature reaches 18°C and then can be seen more bathers on the lake.

2.3. Biogeographic tourist values

The biosphere includes natural pedological cover, plant life on it and the entire animal world. As a source of oxygen, climate modifier, a producer of organic matter and the basis of human nutrition, it is expressed as a direct and indirect tourism value. It has significant recreational, aesthetic, health, curiosity, endemic and notable tourist attraction features. It provides some specific types of tourism.









2.3.1. Flora

Flora of Zlatar consists of forest and grass vegetation with poorly pronounced vertical zonation. In the lower parts can be found deciduous forests of hornbeam, oak, beech, birch, maple, and beside watercourses alder and willow. At altitudes from 1000 to 1300m are spread mixed beech and fir forests. Above this zone there is a zone of coniferous forests of spruce, fir, white and red pine. Flora of forests and grasslands is enriched with various kinds of herbs and edible mushrooms. Especially important are certain types of mushrooms, wild strawberries, cornelian, cherry, wild rose, blueberry, juniper, berries, wort, thyme, ivy, sumac, meadow grass. The plant, which is typical for this region is buckwheat, mountain grain of short vegetation period, it only works at an altitude over 1000m. Due to the widespread forests, pastures and meadows landscapes are diverse and picturesque, giving significant environmental and tourism values and making an attractive landscape.

2.3.2. Fauna

As part of a special nature reserve "Uvac River Canyon" are the four parts of second level of protection: of Pavlovića brod, Rastoka, Veljušnica and Molitva. Here the most often seen animals are fox, rabbit, wolf, deer, squirrel, chukar partridge, field patrige, quail, and only in one part of of Zlatar wood-grouse, as well. The special value represent the Griffon vultures who live in the area of Pavlovica brod. The griffon vulture is our largest bird with a wingspan of about 2.8 m and weight of 6200-8500 grams. They live in colonies and feed on dead animals and do not hunt prey. Through the efforts of the volunteers of the Fund for the the protection of predator birds "Griffon Vulture", numbers are up to date increased to 55 breeding pairs and 300 individuals. This is the largest colony in the Balkans and one of the largest in Europe. Special Nature Reserve "Uvac" stands 104 species of birds and it is the only large nesting of goosander in Serbia. The variety of pristine habitats, the presence of endemic and endangered plant and animal species, are of particular importance for biodiversity and geological diversity, and therefore for the development and promotion of tourist potential of the reserve. The lakes are rich in fish: trout, grayling, chub, carp. The most important fish hatchery is in the river Tisovica. The presence of pure water streams and reservoirs, are habitat for 11 species of fish, and some parts are the natural spawning sites of trout, rainbow trout, lake trout, chub, nase, barbel.

2.4. Anthropogenic tourist resources

Cultural tourism is defined as a form of tourism in which prevails interest in demand for facilities and amenities of cultural character, namely tangible and intangible cultural heritage (Štetić S., Šimičević D., Ćurčić N., 2013). At this place there are a number of significant cultural and historical monuments, which for its historical value represents the significant tourism potential. Archaeological sites on this territory are localities linked to the Stone and Iron Ages. Nearby Radoinje, there is a medieval fortress town of Klak and









Janja monastery of the XVII century. Town Oštrik is located between the villages of Bistrica and Rutoša. The village Radijevići is a location of a wooden church dedicated to the Holy Virgin, built in 1808. There are five very valuable and well-preserved icons there. Church of Sv. Trinity in Bistrica was built in the Middle Ages during Nemanjić dynasty. It was restored in 1833. Holy Trinity Church in Nova Varos is a single building with a rectangle base. It was built from 1857-1869 year. Not with frescoes. In the beautiful surroundings of the church is located the parish house, next to the bell tower. Dubnica monastery is located just a few kilometers from Sjenica lake in the valley of Uvac. Dubnica was built and painted in the year 1422. After more than two centuries, it reaches its ascent. Kajmakama represents a rare structure of Islamic architecture. It was built in the late nineteenth century as an administrative building and a lot of modern and luxurious. Nowadays it has been renovated and the city library and tourist sports center Zlatar are situated there. The mosque built from 1887. till 1894, as a one-nave structure with rectangle base. Ethno village Stitkovo known since the Nemanjić dynasty In the center of the village is the church of the Holy Trinity from 1867, and the school built in 1887. The oldest house was built in 1882. Štitkovo is completely frozen in time. Houses, meat dryers , barns, outbuildings, are as just as they were 200 years ago The village was founded in the early thirteenth century, it was named after the "shield" because in its center was located the "factory" for the production of weapons-shields. Štitkovo is authentic also because it is still inhabited.

3. RECEIVING FACTORS OF TOURISM

Beginnings of tourism development on Zlatar date back to 1968, when on site Babića brdo, near Nova Varos, the hotel "Panorama" category B, with capacity of 240 beds, three apartments, a restaurant with 400 seats was built. It features an indoor pool, a room for the billiards and table tennis, a TV room, a shop, a service for renting ski equipment and facilities for sports. Zlatar is currently treated as a center for medical tourism. Medical Center Health center"" Zlatar-Institute for prevention and rehabilitation of cardiovascular disease is a" B" category hotel, located in the beautiful surroundings on a 5 kilometers distance from Nova Varoš, it has 300 beds. In the Institute, there is a medical clinic, offices for cardiology, physical medicine, rehabilitation, laboratory and physical diagnostics, restaurant of 250 seats, conference hall, table tennis, billiards, bodybuilding and swimming pool. Hotel "Lake" is a B category hotel within the AD catering "Zlatar", located in the center of the city at an altitude of 950 meters. Hotel offers its guests 30 rooms with 80 beds, a restaurant with 350 seats. Logging House is situated on Vodena Poljana 10km away from Nova Varos, at an altitude of 1450m. There are 4 apartments, single and double rooms. The building is known for the specialties of this region. Current number of accommodation facilities in this destination is 1050 beds, which is deficient compared to tourist destinations in the vicinity of Zlatar. By the General Regulation Plan of "tourist zones "Zlatar", there have been planned the zones for building a sports and recreation complex, apartment complexes, hotel complexes, resorts, green space, family and the occasional residence, forest park, etc. The project includes construction of a hotel









of higher category, with all the accompanying cultural, commercial and sports-recreational facilities, which will complete the activating effects of tourism (skiing, climbing, hiking, mountain biking, horseback riding).

4. TOURISM OFFER DEVELOPMENT

Zlatar mountain has exceptional natural potentials for tourism during the whole year. Potentials that should be utilized and incorporated into tourism development programs are preserved environment, more than 500 million m³ of the first category waters in lakes and numerous sources of healthy drinking water, the villages suitable for the development of rural tourism. Zlatar was proclaimed the air spa, by Decree of the Government of the Republic of Serbia.

4.1. Rural tourism

By definition of the Council of Europe from 1986, rural tourism is the tourism that includes all activities in rural areas, and the most important characteristics of this kind of tourism are quiet environment, preserved environment, the absence of noise, communication with the hosts, home-cooked food and getting to know farmers 'affairs' (Todorović M., Štetić S., 2009). Rural tourism is being developed within the area of Zlatar mountain because its specific attributes allow different forms of tourist activities. Objectives and strengths of rural tourism are the utilization of existing facilities and natural treasures. Home atmosphere, traditional cuisine, a healthy natural environment, clean water are just some of the advantages of this form of relaxation and recreation. Additional activities, such as hiking, rafting, trekking, nature study, fishing, visits to sites of historical interest, visits to rural events, mountain biking, skiing, paragliding, picking herbs, combined with affordable prices are the reason more for the rapid development of this type of tourism into a leading branch of the tourist offer. At this place there are about a dozen facilities specialized for tourist accommodation and stay, and also a 100 categorized rural households engaged in rural tourism. The rural households in villages Akmačići, Drmanovići, Radijevići, Brdo, Radoinja, Viloví, Rutoš, Vraneš, Jasenovo also offers 250 beds from I-IV category. Ethno village Vraneša is located near Kokin Brod. In addition to the central building with a restaurant and a hall for presentations, there have been built a medical clinic and five cabins each with four beds, intended for indoor type of tourism. In addition to apartments and bungalows of pine it also possesses a wellness center with a Russian bath, a Finnish sauna and it is in the highest category of ethno-tourism. Rural tourism is a big chance of Zlatar area, there are fulfilled normatives of attractiveness of this type of tourism such as direct and immediate contact with nature. It has been preserved part of material and spiritual cultural traditions, kindness, hospitality and family atmosphere.









4.2. Sports tourism

Active sports tourists go on active sporting holiday, where sport is the main reason for traveling or on holidays with sporting activities. Passive sports tourists can be classified by how much sport is important to them when traveling. Techies observers are those who intensively experience passive participation in sports activities observed (Šimičević D., Nicić M., 2009). Zlatar mountain provides ideal conditions for the development of sports tourism in both the winter and in the summer. Capacities of sports fields allow the active preparation of athletes for whom is particularly significant altitude over 1000m, as well as for recreation, health maintenance of guests. RH center ""Zlatar" has excellent sports courts for the football, volleyball, handball and basketball, and two ski trails. A number of sports facilities in the city, sports facilities in the villages Radoinja, Rutoš, Akmačići, Bistrica, Božetići, city football stadium with an athletics track, sports courts, two closed swimming pools within the unit on Zlatar, gym in town, ski lifts, cable car that connects the city with Zlatar, three hotels, a number of motels, accommodation in private houses, are a good infrastructure for the development of sports and recreational tourism. It is planned to build two more ski trails with associated amenities (apartment complex with sports and recreational facilities, amusement park with central facilities, sports and recreation complex with a club facilities).

4.3. Hunting tourism

Hunting tourism as a specific form of tourism is very attractive for tourists around the world. This form of tourism trends includes active vacation and recreation, staying in healthy natural environment, enjoying the attractive flora and fauna of hunting areas and education and the purpose of successful hunting and tourism activities. The central area of the development of hunting tourism are the hunting grounds. Hunting Association "Kozomor" from Nova Varoš manages the hunting ground "Zlatar" total area of 55 900 hectares. Constantly cultivated species of wildlife within the hunting ground ""Zlatar" are deer, wild boar and a rabbit. Hunting grounds has the following hunting facilities in function: four stable stands, five feeding for the big game, and two feeding for small game. Professional service has the hunting area manager and four gamekeepers volunteers. Hunting tourism is not sufficiently developed.

4.4. Events

Tourist events are pre-organized events that are capable to attract visitors with their content and quality, regardless of other tourist attractions that are located close to the venue of the event. The following events are organized at this place: Zlatar wolf chase is held in February, Culture Days takes place in February, Night slalom held in February, Golden Hands of Zlatar. held in May, Municipal plowing competition held in early May, Country-Olympics held in July, Zlatar jeep races held in September, Days of Zlatar held in August









and includes several events: Rafting through the canyon of river Uvac; Exhibition of honey Zlatar; Zlatar Fishing Cup; Cheese Festival within Božetići.

The desire of locals is to present such tourist trade events present the achievements and opportunities of this region in the production of healthy food, the conditions for the development of sports, rural, gastronomic and health tourism, and to present to their guests the heritage of their ancestors, through those tour-trade events.

4.5. Gastronomic tourism

Food and drinks are viewed as a necessity and are treated as a necessity during tourist travel, and not as important complementary or main motive of tourist movements. Tourists are not only interested in attraction, healthy and preserved environment, sports and other activities, but also for the gastronomy as an integral part of these parts of the product within a tourist destination or as a stand-alone travel motif. Cuisine is an integral link in the chain of experience of destination (htpp://www.zlatar.rs). Lovers of good food should not miss the opportunity to taste the specialties of Zlatar area, the cream from Jasenovac, Radijevići buckwheat pie, lamb in cream on Zlatar, trout in Draževići, pies "gužvara", peppers in sour cream, corn bread and corn meal flour from the water mill, jelly and many other specialties. This area is known for its homemade juices of carrots, blueberries, and local brandy. Zlatar is unique for buckwheat pie and fatty cheese, which has become a trademark.

5. TOURIST MARKET OUTREACH STRATEGY

Tourist Organization "Zlatar" has been founded in 2001, as a municipal organization for the promotion and advancement of tourism in Nova Varos in order to promote its tourist value and position of the municipality as a tourist destination 2007. There was a merger of sports and tourism, by establishing tourist and sports center "Zlatar" by the Decision of the Assembly of Nova Varos. Duties relating to promotion of tourist offer are performed as part of this center and their mission is focused solely on the marketing and promotion but there is no progress in the field of destination management. The main reason is the lack of financial resources as well as insufficient knowledge of destination marketing and inadequate human resources. Development Strategy of a destination that sees opportunity in specific forms of tourism must have clear objectives and directions, because competition in the market aims high quality with reasonable price. Therefore, the tourist offer must focus on new markets, creating specific products, creating marketing of destination and quality and timely routing, in order to reach the desired consumers. Focus on creating interesting and attractive destination offers in order tourists stayed longer and wanted to come back. In order to select the appropriate marketing strategy, service providers and makers of contemporary forms of tourism products must define segments within the market and to identify internal resources at their disposal.









6. CONCLUSION

Rich natural resources, river Uvac with its lakes, Special Nature Reserve Uvac, exceptionally favorable climate of the mountain Zlatar which is air spa, preserved nature, cultural and historical heritage, traditions and hospitality, the existing infrastructure for sports and accommodation facilities, provide a good basis and the ability for development. Tourists are attracted to the primary offer, tourist attraction of places, so the the comparative advantage should be taken. Basic economic effects of tourism are in the secondary tourism offer: accommodation, transport, shopping, eating. The current situation of tourism development on Zlatar is quite unpleasant. Lack of human resources in tourism, information centers and points, pedestrian and bicycle trails, tourist signs, lack of longterm strategies, inadequate legal regulation and institutionally organization of tourism, insufficient and inadequate accommodation capacities, incompleteness of the tourism product, economically unjustified using of the existing resources, the lack of domestic capital, lack of professional management, seasonal business, are just some of the problems to be solved and implemented systematically through the preservation of natural, cultural and historical resources by the action plan in order to develop tourism and sustainable development. An important role is played by the private sector which could, through the improvement of some of the content, be able to relatively fast enrich the additional tourist offer and thus contribute to commercial valorization of the resources available in these destinations. The basic precondition for the development of rural tourism on Zlatar is adequate education and training of rural households, from the standards for acceptance and accommodation of guests, method, quantity and quality of the provision of catering services, to the behavior with the guests and other necessary conditions for a pleasant stay of tourists. It is necessary to activate the rural population to develop and regulate the rural area as a long-term perspective and a choice for life. By providing social and economic security of rural host the quality of life in the countryside would be enhanced, and thus to slow down the migration of young people to the city, and that would affect the rejuvenation of the population and thus improve the structure of the active working population. The production would be increased and it would enable better standing of farm products, homemade items and products of traditional crafts. An important precondition for the development of rural tourism on Zlatar is also marketing and distribution of the tourism product. Tourists are not sufficiently informed about the potential of the mountain itself, and what can it offer. There are couple of sites where everything is reduced to setting up the basic of the information offerings. It is necessary to do a unique Zlatar tourist destination site where shall be offered everything that could intrigued domestic and foreign tourists to visit this destination, consolidate all information on how to get to the Zlatar, to direct sales online. Essential changes would occur by introducing a unified system of information and communication that would be accepted by all of the participants in the provision of tourism services of this destination-hotels, motels, ski centers, rural households, hunting and fishing associations, tourist organizations, mountaineering clubs, transport organizers and all subjects of the touristic offer. The development of this branch should be accessed on conceived and organized manner. The sensitivity of tourist demand,









offer's flexibility, high fixed costs due to the seasonal business, slow repayment of funds invested in tourism facilities, tax liabilities and similar seek constant engagement and the coordination of activities at the state level. Without the strong support of state institutions it is hard to expect results that can be implemented according to the comparative advantages of tourism in Serbia.

REFERENCES

- 1. Dinić. G., (2011) Tourism Geography, Faculty of Economics, Belgrade
- 2. <u>http://www.novavaros.com/</u>
- 3. Štetić S., Šimičević D., Ćurčić N., (2013), Specific forms of tourism, Belgrade
- 4. Todorović M., Štetić S., (2009), *Rural Tourism*, Faculty of Geography, University of Belgrade
- 5. Šimičević D., Nicić M. (2009), *Gastronomy as an integral part of destination promotion*, Collection of scientific gathering Contemporary tendency in tourism, hotel management and gastronomy 2008th, PMF-Department of Geography, Tourism and Hotel Management, Novi Sad
- 6. htpp://www.zlatar.rs









USE OF RECYCLED GLASS IN THE CONSTRUCTION INDUSTRY AS A METHOD OF PRESERVING THE ENVIRONMENT

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Abstract: In modern times the extent of the impact of construction industry on the environment is realized, as well as the potential to improve this relationship and integrate it into a comprehensive environmental system. Natural resources that are used in the construction industry are not inexhaustible, and as such must be protected. Reuse or recycling of construction materials after the demolition is one of the methods of ecological construction. The use of secondary, recycled raw materials in the construction reduces waste and saves natural resources as well as energy needed for their production. Glass is one of the most exploited architectural materials in modern construction industry, due to its specific characteristics, aesthetic qualities and design flexibility. On the other hand, long period required to decompose it makes it one of the largest polluters. Recycling of waste glass as a building and packaging material is a significant method of ecological behavior towards the conservation of the natural environment.

Key words: recycling, glass, construction industry, enviroment, ecology

1. INTRODUCTION

With the expansion of environmental awareness and striving for absolute sustainability, contemporary trends in architecture are making increasing demands on construction techniques and materials. In modern times the scale of the impact of construction on the environment is understood, but also the potential to improve this relationship and integrate it into a comprehensive ecological system. Natural resources that are used in the construction industry are not limitless, and as such they must be protected. Building structure must be designed, built and demolished in such a way that the use of natural resources is sustainable, and their preservation is guaranteed. Reuse or recycling of construction, materials or parts of the building after the demolition, is one of the methods in the function of ecological construction. The use of secondary, recycled raw materials in the construction reduces waste and saves natural resources. On the other hand, it can be concluded that the buildings are one of the major consumers of energy, in terms of the amount of energy required for producing the material required for building. Recycling of waste materials and their reuse as secondary raw materials, is energy saving, because less energy is spent on processing than on production of the materials. Methods of recycling building materials are methods aimed at improving the energy efficiency and sustainable construction, and they are priorities of modern techniques in construction engineering and design.

Glass is one of the most exploited architectural materials in modern construction, due to its specific characteristics and design flexibility. The most significant negative characteristics









of glass is that it is not a sustainable material because it needs more than 4000 years to decompose in nature, and therefore waste glass is one of the biggest polluters of nature. Recycling of waste glass as a building and packaging material, represents a significant method of ecological behavior towards preserving the environment. In the construction, recycled waste glass found its multiple applications, due to its specific chemical and physical characteristics, but has not yet reached great potential that glass as a material has. Numerous studies about the possibilities of application of recycled waste glass in the new building materials are emerging. It satisfies the required performance and quality, and at the same time its production proves to be economical.

2. SPECIFICATION OF GLASS

2.1. General characteristics of glass

Glass is a transparent, amorphous, hard, brittle and chemically resistant material, obtained by melting the main raw materials: quartz sand, soda and calcium oxide. The glass is mostly amorphous silicon dioxide, which is characterized by strength, inertness and biological inactivity.

A pure silicon dioxide melts at 2000° C and it would be highly uneconomical to melt it at that temperature, because that would mean increased energy consumption. For this reason, during the production of glass soda (sodium carbonate - NaCO3) and limestone (CaCO3) are added. By adding soda the melting point is lowered to 1400° C, but the glass thereby becomes water-soluble (water-glass), so this is prevented by adding limestone (that turns into calcium oxide CaO by releasing carbon dioxide). In addition to the basic raw materials, coloring agents, such as carbonates and oxides of other metals are used in the production of glass.

For the application of glass in architecture, according to Čikić-Tovarović (Čikić-Tovarović J., 2009), the most significant are the following groups of properties:

- 1. Physical properties of glass, which include:
 - Optical and energetic: transmission of light; refractive index
 - Thermal properties
 - Fire resistance
 - Acoustic properties
 - Porosity
- 2. Mechanical properties of glass: strength, hardness and wear resistance
- 3. Chemical properties: chemical stability
- 4. Visual properties: transparency, color and surface character

2.2. Typology of glass

FLOAT glass - 90% of world production of flat glass is glass obtained by "float" process. Float glass has an ideal flat surface which is characterized by transparency and clarity of glass mass, uniformity of thickness and parallelism of surfaces. Ordinary glass is colorless, but can be produced in colors: bronze, green, gray, azure and dark blue. Usually colored









glass is also called "Parsol". It is used for glazing windows, doors, greenhouses, walls and others.

INSULATING glass - consists of two panes of glass separated by a spacing frame and merged with organic adhesive-sealant. The space between the panes can be filled with air or inert gases that contribute to glass heat insulation. Low-E glass is an achievement in the improvement of insulating capability of glass, on whose surface selective layer of oxide molecules is deposited, that reflects only thermal radiation, so that part of the heat is returning back to the source.

STOPSOL glass (float + layer for reflection) is the glass for energy control, which is selectively permeable to the amount of light and the type of radiation according to their wavelength.

PARSOL glass (float colored throughout the mass: bronze, silver, green, blue) is the glass to which color was added during production. It is widely used because of the possibility to absorb light and heat, and thus it is used in automotive industry, construction industry, furniture industry etc.

WIRED glass - glass with wire mesh inside the glass, which provides cohesion in the case of breaking. It is most often used for skylights, home doors, filling the balcony railing, industrial buildings and external façade cladding.

PAMPLEX glass is safety double glass with the foil between the two layers, and the most commonly is 4+4 mm thick. Safety glass can be tempered and laminated glass. Is called safety glass because when it breaks sharp pieces are not created, but they disperse into many small pieces (tempered glass) or during fracture pieces remain attached to the inner foil (laminated glass).

2.3. Ecological advantages of glass

Glass is a valuable raw material that is 100% recyclable. The term recycling means the organized collection of objects of the same material that no longer have use value, their reprocessing into new products and re-use (http://www.nibusinessinfo.co.uk/content/recycling-glass-construction-projects, 2014). Old glass can be melted countless times, without losing its quality. It is used as a valuable raw material for the manufacture of new glass packaging, or as an aggregate in the production of new building materials. When glass is recycled, it saves significant amounts of energy and sand which would be used in glass manufacturing. And thanks to the reuse of glass that has lost its use value, the amount of waste, and therefore the pollution of air and water is reduced.

2.4. Glass as a modern building material

By its inevitable development, the humanity affects the environmental changes. In the construction industry, as well as in other segments of the economy, it is necessary to satisfy human needs without harming the environment. Control of heat loss, heat passage, UV ray passage, light transmision, sound insulation, including protection from injuries during the period of exploitation are achieved by selecting proper type of glass for various applications in the construction industry.









2.5. The main trends in the development of glass industry

Great technological expansion and development of design methods in architecture, has set high requirements for the glass as a building material. The original role of the glass in construction was to separate the outer from the inner space, but as awareness of the great possibilities of this material grows, it is followed by the need to explore this field and find a way to use glass in the best possible way. After the invention of float glass, other innovations in the glass industry quickly followed, which changed the meaning and use of glass in modern architecture. This has led to the emergence of reflective and Low-E glass, highly selective glass, glass with self-cleaning coatings, etc. One of the significant tendency that derives from the synergy of the glass industry, construction industry and the environment, is diversity of the use of recycled glass, which only recently got a chance to show its qualities.

3. GLASS RECYCLING

Glass recycling is the process of turning waste glass into useful products that can be reused after processing. Glass waste should be categorized and sorted according to the chemical composition, and then depending on the final desired specifications of the new product, according to the workmanship and design, and color of the glass. As stated in (http://www.ekologija.com.hr/recikliranje-stakla, 2014), since the glass after the recycling process retains its color and because it can be chemically incompatible, it is necessary to pay attention in order to avoid interference.

Glass makes a large part of household waste and industrial waste. The glass in the municipal waste is usually composed of glass bottles, broken glass, light bulbs and other items (Figure 1).



Figure 1: The average composition of household waste

Glass recycling requires less energy than manufacturing of glass from sand and other components, and also saves the basic raw material from which glass is made.









The use of recycled glass as aggregate in concrete is becoming more popular method of improving the concrete material in modern construction, especially after extensive research at Columbia University in New York. This method improves the aesthetics of concrete, and recent research results have shown that concrete with recycled glass has better long-term strength and better thermal insulation due to the thermal properties of glass as aggregate. Other secondary markets of recycled glass can include: packaging products, making decorative materials, production of ceramic sanitary ware, glass as a liquid agent in the manufacture of bricks, artificial turf for sports fields, making work surfaces from recycled glass, intermediaries filtration (usually water), glass as abrasives, glass as aggregate.

3.1. The technological process of glass recycling

The process of glass recycling basically means the generic process of recycling, collecting recyclables, sorting by type, processing of raw materials and production of new products using recycled materials. According to (Radman A., Pavlečić T., Schreiber M., 2009), the method comprises of the following stages:

1. Sorting - the glass is sorted by color or type, because various chemicals should be added later to obtain the desired specifications of the new raw material;

2. Removing impurities - waste glass passes through a magnetic field, eliminating metal parts. Separation of plastic, paper and other impurities is performed mechanically;

3. Processing - this process involves crushing and grinding waste glass into small pieces in order to shorten the melting time and save energy;

4. Comminuted glass is mixed with quartz sand, soda, lime and dolomite, and melted at 1500° C;

5. Hot melted glass is being prepared for the development of certain forms;

6. Finished products are cooled in a cooling tunnel, then the pieces with defects, cracks or irregular shape are removed;

7. Finally, the finished products are packed and distributed.

3.2. Recycling of glass from construction facilities

It is known that the developed countries in the late twentieth century, faced with a large environmental problem - construction waste, and as one of the possible solutions is procedure for its recycling, which resolves the issue of large amounts of waste, and the question of excessive exploitation of natural resources.

The most waste glass is obtained from the demolition of buildings and replacement of windows in the renovation projects of buildings (flat glass). Also a large part of the waste glass is made from worn-out items for lighting (fluorescent tubes, monitors and TV screens) as well as structural glass facade of the modern office blocks. As stated in (http://www.nibusinessinfo.co.uk/content/recycling-glass-construction-projects, 2014):

"The main causes of large amounts of waste glass are ordering larger quantities of material than necessary, breakage during installation, damaging during storage, frazzle or damage during exploitation." It also states that there are certain limitations in the use of waste glass, which usually occur when it comes to recycling of glass from buildings because of inaccessibility or exposure to different influences:







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- Separating glass from the substructure which is attached can be expensive due to the the complexity of the works;

- Loading and transport of glass to the recycling centers can be expensive, due to the weight and sensitivity of the glass, and the distance of centers;

- Straight (ordinary) glass can be contaminated in various ways, which requires additional processing before reuse.

Despite the growing awareness of the need to recycle waste glass, waste glass from buildings is almost never recycled into new glass products, instead it is broken together with other building materials and disposed of at landfills, where it is difficult, almost impossible to extract only the glass afterwards. In order to reduce the amount of waste glass of buildings, or in order to better prepare waste glass before exploitation for recycling after the exploitation, it is necessary to:

- Provide personnel training about handling the materials (their installation, maintenance, dismantling);

- Provide storage facilities for waste glass to avoid damage and contamination;

- Organization of delivery of materials to specific places on the construction site to reduce the risk of breakage during handling and installation;

- Organize transport for waste glass to recycling centers in order to use the waste glass in the highest percentage;

- Keeping records of the necessary supplies of glass material to avoid ordering larger quantities than needed.

Thus would be achieved that most of the flat (ordinary) glass used in buildings can be dismantled and recycled in a glazier furnace.

For recycling glass from buildings, one should consider the problem of diversity of structures and diversity of the applied glass. Glazing of buildings is done in different ways, depending on the use of the building, materials from which frames for glassare made, the period of installation, the location of the building, etc. In general, as mentioned in (Glass for Europe, 2013), glass as a construction waste can be divided into three categories:

1. Glass facades - tertiary glazing of the building;

2. Glass of the windows and exterior openings on residential buildings and individual residential houses;

3. Glass which can be found in the interior of buildings, various types of glass walls, portals, mirrors...

A wide range of facilities and types of glass and the fact that the glass is never "freestanding" but has a frame or substructure makes the process of preparing for recycling difficult. All aspects must be considered when collecting, sorting and further processing waste glass.

4. USE OF RECYCLED GLASS IN THE CONSTRUCTION INDUSTRY

4.1. Recycled glass as an aggregate in concrete

The huge amount of concrete that is produced and installed around the world requires a large amount of concrete aggregate. In this way nature is destroyed (exploitation of gravel,









stone, etc.). One of the possible applications of waste glass is processing it into expanded glass aggregate for lightweight concrete.

New fine aggregate that consists mainly of recycled glass, was developed in Sweden for the purpose of making of concrete. The presence of glass in the aggregate for making of concrete or asphalt, if it is not properly treated, can reduce firmness of finally obtained materials. ""Microfiller" is the result of the industrial process that consists of procedures of purification of glass by separating and washing. The glass is then dried and crushed to the required particle size. The product is then added to the concrete mixture in the process of mixing with the other ingredients. Appendix "Microfiller" will improve the properties of concrete and fresh, and tempered condition (Tam V., Tam C.M., 2006).

The benefits of using recycled building materials and artificial aggregates (such as the expanded glass) instead of natural aggregates are great, and are reflected in the reduction of exploitation of natural aggregates, reduction of waste materials generation, and increase of the amount of recycled materials.

4.2. "Geofil Bubbles"

"Geofil Bubbles" is the name of the the granulate of silicate foam - aggregate based on the expanded waste glass (Figure 2), which is produced in Hungary "Geofil" LTD. - Tatabánya. One of the advantages of aggregate "Geofil Bubbles" is that it is made from mixed communal waste glass and the construction waste glass, which does not have to be completely clear, but may contain various substances of organic or inorganic origin, which simplifies the processing of waste glass, and therefore reduces the cost. Grains of glass processed in rotary furnaces are 2- 25 mm in diameter, have excellent thermal insulation characteristics and well clings for various inorganic and organic binders (cement, gypsum, bitumen, various resins, etc.).



Figure 2: "Geofil Bubbles"- expanded glass aggregate for lightweight concrete

Possibilities of application of "Geofil" expanded glass aggregate are multiple, and so far its use in construction is the most investigated, but also in fruit growing, horticulture, green roof creation, etc. In construction industry it is used for the preparation of composite









materials with various binders (cement, gypsum, lime, bitumen, epoxy mortars, etc.). Most commonly it is used as aggregate of lightweight concrete and mortar to create thermal insulation layers of walls, floors, and material for soundproofing, for the production of thermal insulation elements- blocks for masonry, and reinforced concrete for structural elements production.

As stated in (Kasaš K., Čeh A., Karaman G., 2009), the important features of "Geofil Bubbles" are:

- volumetric mass of grain: 450-1800 kg/m3
- bulk density: 250-1100 kg/m3
- strength of aggregate: 0.3 to 15.1 N/mm2
- water absorption: 0.4 to 40%.

According to (Kasaš K., Čeh A., Karaman G., 2009), the characteristics of lightweight concretes made from this aggregate are as follows:

- volumetric mass: 350-2000 kg/m3
- coefficient of thermal conductivity: 0.1 to 1.5 W / mK
- compressive strength: 2.5 to 58 N/mm2

- sound insulation (lightweight concrete 12cm thick, vol. mass 1100 kg/m3) 42 dB "Geofil" aggregates from glass foam can also be used for making constructive lightweight concrete. If only "Geofil" aggregate of expanded glass is used for the production of lightweight concrete, a lower volume mass of hardened concrete can be achieved, up to 15-20%, compared to normal weight of concrete of the same strength class. In this way, the dimensions of the structural elements can be reduced, as well as required quantity of reinforcement (as much as 20 to 30%). It is important to mention that lightweight concrete made with "Geofil" aggregate, may have 75% of strength of 28 days old concrete after 48 hours (Kasaš K., Čeh A., Karaman G., 2009). For concretes made from the expanded glass aggregate shrinkage is larger compared to traditional concretes made with the same volume fraction of natural unbound river aggregate (Figure 3). It is interesting, however, to emphasize the fact that the danger of cracks is much smaller. By applying a certain minimal amount of mineral fiber, a crack can be practically eliminated.



Figure 3: Concrete with expanded glass aggregate

Lightweight concretes made based on "Geofil-Bubbles" aggregate have already found application in a number of countries, as thermal and sound insulators, fire protection









system, structural reinforced concrete and prestressed constructions. This application is still in a relatively small amount, despite the fact that the positive impact of the application of lightweight concrete made from recycled waste materials is of great importance for the environment protection.

4.3. Recycled glass as an aggregate in cement mortar

It is possible to use recycled glass as a fine replacement for aggregate in cement mortar. "The cement mortar with aggregate of recycled glass shows better workability characteristics, less shrinkage during drying, improves the fluidity and resistance to acids" (Ling T.C., Poon C.S., Kou C.S, 2011). In this way it is possible to produce a new different aesthetic design of architectural mortar, and with ecological justification (Figure 4).



Figure 4: Cement mortar with aggregate of recycled glass

4.4. BituBlock

"BituBlock" is an experimental material made from recycled waste, which reduces harmful emissions and saves natural resources, and it is assumed that it could be a strong competitor to the concrete. Professor John Fort of the University of Leeds is the creator of this revolutionary process that converts waste into a strong, less energy intensive construction material.



Figure 5: BituBlock









Researches conducted by Professor John Fort (Barton J., 2007), showed that the necessary characteristics of the waste which is used (particle size, hardness, etc.) can be defined according to the desired characteristics of the final material and its purpose. This creates a broader range of potentially suitable waste materials, so in its composition following ingredients can be found:

- recycled waste glass
- ash of incinerated sewage sludge
- ash from incinerators of municipal waste

- waste generated during construction and demolition, and other recycled aggregates

- waste from the quarry.

This will likely be an important feature in the commercialization of BituBlock because the blocks can be made from local waste materials, and there is no risk that there will be an interruption in the continuity of supply. "BituBlock is made by mixing the appropriate materials from the waste, the mixture is compressed in a mold and dried in the heat, oxidizes and hardens bitumen. BituBlock is a high-performance product that is about six times firmer than traditional concrete blocks" (Barton J., 2007). Detailed studies should confirm the assumptions about the sustainability and cost of this material, but based on previous comments from experts in this field, one can predict its extensive use in the construction industry.

4.5. Recycled glass in road construction

The possibility that recycled glass could be used in the construction of highways depends on the method of collection of waste glass, cost and public factors. In general, a large amount of waste glass required for such procedures can be found only in the large urban areas.



Figure 6: Recycled glass as aggregate in asphalt concrete

Many companies have experimented with glass in the construction of highways, some even allow use of glass as a substitute for aggregate in asphalt concrete pavements. In (Ling









T.C., Poon C.S., Kou C.S, 2011), New Jersey - Department of Transportation is set as na example, which allows the replacement of natural aggregate with recycled glass, up to 10% of glass (by weight). The results suggest that the asphalt with aggregate of recycled glass behaves the same way as asphalt from natural aggregate. In Washington, they conducted various laboratory testing of waste glass as a construction aggregate, and the results of these studies are recommendations for use of specific quantities of recycled glass in construction materials and products.

5. CONCLUSION

The awareness of potential of symbiotic relationship between ecology and economy is developing in modern construction industry. High costs of removing of abandoned buildings, growing environmental awareness of architects and redefining aesthetic standards, influenced the change in the approach to the space. Recycling of used materials becomes a matter of prestige and step out of the framework of the traditional approach to construction.

Previous research has shown that the use value of recycled glass in the ecological approach to construction industry can not be ignored, and that precisely this quality is needed to improve the well-known architectural materials and get a new aesthetic value. Recycled glass as aggregate in many building materials gives the approximate quality as natural aggregates, and at the same time saves natural resources and energy, and reduces negative impact of a waste glass to the environment. Based on previous researches it can be concluded that the use of recycled glass in the construction industry is not limited, and that many of its potentials will be established eventually.

Transparent Concrete (Light Transmitting Concrete) is one of the new materials which finds its application in architecture, and one of its ingredients are glass fibers which allow light transmission. Due to the large cost of production of this material its extensive application is not yet possible. Research in this domain should be conducted, because there are serious indications that the use of recycled glass in the manufacture of transparent concrete can significantly reduce the cost of its production.

The use of recycled glass has not yet experienced an expansion it deserves, but lately its great ecological and aesthetic value indicates its significant potential in the inevitable development of environmental awareness and on contemporary construction.

REFERENCES

- 1. Barton J. (2007), *Case Study: BITUBLOCK A novel construction unit using 100% waste derived aggregate*, University of Leeds, October, 2007
- 2. Čikić-Tovarović J. (2009), Staklo, arhitektonsko staklo opšti pregled osnovnih osobina materijala, Build magazin, No. 11
- 3. Glass for Europe (2013), *Recycling of end-of-life building glass*, Glass for Europe, Brussels









- 4. Huang Y., Bird R., Heidrich O. (2007), *A review of a use of recycled solid waste materials in asphalt pavements*, Resources, Conservation and Recycling Volume 52, Issue 1, November 2007, pp. 58-73
- 5. Kasaš K., Čeh A., Karaman G. (2009), *Nova vrsta agregata za lake betone na bazi otpadnog stakla*, Zbornik radova Građevinskog fakulteta, Issue 18, pp. 109–119
- 6. Ling T.C., Poon C.S., Kou C.S. (2011), *Feasibility of using recycled glass in architectual cement mortars*, Cement & Concrete Composites Volume 33, Issue 8, September 2011, pp. 848–854
- 7. Radman A., Pavlečić T., Schreiber M. (2009), Brošura "*Otpad je i tvoj problem*", Viza MG d.o.o, Zagreb
- 8. Tam V., Tam C.M. (2006), A review on the viable technology for construction waste recycling, Resources, Conservation and Recycling Volume 47 Issue 3, June 2006, pp. 209-221
- 9. <u>http://www.ekologija.com.hr/recikliranje-stakla/</u>, accesed July 2014
- 10. <u>http://www.nibusinessinfo.co.uk/content/recycling-glass-construction-projects</u>, accesed July 2014









PHARMACEUTICAL WASTE MANAGEMENT

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Abstract: Pharmaceutical waste is hazardous waste generated in the production and trade of medicines and medical supplies (including pharmaceuticals, drugs and chemicals that are scattered prepared and unused or have expired expiration date or be rejected for any reason, as well as organic pollutants), as well as equipment used in handling. The pharmaceutical waste includes medicines (finished, galenical and main medicines and pharmaceutical substances) which are out of date. Herbal, traditional and homeopathic remedies can also be considered as pharmaceutical waste, depending on their composition.Producer and owner of pharmaceutical waste shall be treated with pharmaceutical waste as hazardous waste. Waste Management aims to protect human health and the environment with finansijskoisplativo handling and disposal of waste.

Keywords: Project, Pharmaceutical Waste, Waste Management, Collection, Monitoring

INTRODUCTION

Pharmaceutical waste are all drugs, including primary packaging, and all accessories used for the application of these products, which are located in praavnog, or a natural person who has been engaged in the health care of people who have become unusable due to the expiry date, failure in terms of their prescribed quality, contaminated containers, spillage, wastage, prepared and not used, returned by the end user, or can not be used for other reasons. This waste may be: potentially hazardous pharmaceutical waste is waste that poses a risk in the event that they are not required by managed and requires procedures prescribed for hazardous waste management. Hazardous pharmaceutical waste is the waste of medicines and disinfectants that contain heavy metals such as barium, cadmium, cobalt, lead, mercury (including amalgam), nickel, silver and most of their compounds, and so on. And drugs whose composition can not be determined that due to its composition require special treatment procedures. All pharmaceutical company waste generated in health care facilities and pharmacies in Serbia is treated and disposed of as hazardous waste in accordance with the relevant legislation in the Republic of Serbia. Pharmaceutical waste can be generated in IN HEALTH CARE FACILITIES (pharmacy, hospital departments, medical clinics, dental clinics, health centers, Institutes, Divisions) and NON HEALTH CARE FACILITIES (manufacturers, wholesalers, educational institutions, households). Sorting of pharmaceutical waste is carried out by: the characteristics of the active substance, controlled drugs, narcotics, collection, transport, common storage, recording, characterization, categorization, export, and finally disposal. Pharmaceutical waste is usually disposed improperly, throwing it in the garbage can or into drains. Improper destruction of pharmaceutical waste results in the pollution of the environment, which certainly affects the ecosystem. Medicines that have expired and they no longer use most often remain a part of our house pharmacy.









Whether it is about drugs prescribed by a physician or preparations that can be bought without a prescription they can pose a danger of potentially toxic substances in our homes. This type of disposal of pharmaceutical waste is usually the consequence of ignorance and lack of information about what to do with such drugs. This paper aims to administrators to manage, environmental impactand treatment of pharmaceutical waste.

1. PHARMACEUTICAL WASTE MANAGEMENT

The importance of proper management of pharmaceutical waste is being improperly uištavanje pharmaceutical waste resulting in contamination of the environment, and it certainly affects the ecosystem.Numerous studies and surveys have identified a presence of drugs or their metabolites in surface water and groundwater as well as soil. When the drugs in blister such drugs must be returned in the original packaging. The original packaging must be closed with tape and stored in a container made of hard plastic and further access to the previously described manner. Certainly it is the safest and most effective form of waste management farmecutskim return drugs into the hands of experts who will continue on the best way to handle them. The role of the modern pharmacist in this segment of the pharmaceutical care and pharmacy is collection of points for household pharmaceutical waste, directly or indirectly, and it is necessary to comply with such regulations.

The collected drugs aw on hand to care companies licensed to handle hazardous waste, according to strictly laid down procedures. The most common method of destroying drugs is burning. With regard to the pharmacy, JU Sarajevo for the first time launched a project to collect pharmaceutical waste approaching trends. In western countries, this exceptional opportunity, all we need to use and properly dispose of pharmaceutical waste from our homes. With regard to increasing awareness and scientifically based evidenceabout the effects of drugs on the environment is of great importance of properly treatment with pharmaceutical waste.

countries implement programs that enable the populationrefound of In manv unused medicines and drugs that have expired. often these programs Most are implemented through a pharmacy that presenting a place where these drugs can be without compensation. Practice is to return when medication keeps a accommodated torecord the medications that are returned (Rp / Br.Rp) and register which aims ultimatelyfinancial value. Many governments across the relevant authorities developed information leaflets about how to manage household pharmaceutical waste. Thus, the solid forms recommends that removed from the original packaging and store in a container made of hard plastic. Some programs recommend that these drugs dissolved with Amal water to prevent their misuse. When it comes to liquid medicinal forms, they must be in the original packaging placed in a container made of hard plastic.

Problem of drugs and their impact on the environment is becoming a popular in early twenties when he proved that fluokoetin from the group of antidepressants dangerous to living organisms in the water and was found in fish tissues (e.g. Carp), similar toxicity shows diazepam. Given that some drugs may be obtained without a prescription, it is clear that due to the frequent use of a large and can be found in the vicinity. For diclofenac the drug was found to have a toxic effect on algae. In Pakistan and India, it was confirmed that









diclofenac in surface water is one of the main patterns of death of different species of birds of prey, as to cause nephrotoxicity. Beta blocker (propanol, metaprolol), which is a membrane stabilizers, have been found in surface waters, indicating toxicity to planktonic species. Producer and owner of pharmaceutical waste are obliged to treat it as hazardous waste. Pharmacies and medical institutions are obliged to useless drugs (drugs with expired shelf life, bulk drugs, defective drugs in terms of quality, etc.). Returned to the manufacturer, importer or dealer for safe treatment whenever possible, especially cistotatics and narcotics. In case it is not possible to submit the pharmacies that are required to collect unusable drugs from citizens. Pharmacies and medical institutions keep and maintain records of pharmaceutical waste and data submitted to the Agency in accordance with the regulations governing integral cadastre of polluters.

Minister in charge of Health and the Minister shall prescribe the manner of pharmaceutical waste management, a list of pharmacies that are required to collect unusable drugs from citizens. The Ministry will in this case to provide all the help and support especially in speeding up legal procedures in order to process medical waste management in Serbia improved. Although it sounds strange in this area, developing countries have a lot to be and praise. In fact in most there is no separation of the infectious waste noninfectious, but statistics show that the total medical waste in these countries ranges 0.5 - 3 kg per person per annum.



Figure 1: Disposing of expired drugs duration

2. PHARMACEUTICAL WASTE COLLECTION

Annually collect 460,000 tonnes of hazardous waste, in which one of the medical and the zravstvenih the lips in Belgrade during the same period, remove the 2,314 tons of medical waste.

A demonstration of pharmaceutical waste incinerators and many institutions are obliged to pay large sums of money to medications with expired shelf life or those who were withdrawn from circulation and destroyed exported abroad. Although it was once announced to a plant that emits štetnegasove, our country will soon need to get, it will not be possible in the next five years.

A number of health facilities, pharmacies, pharmaceutical manufacturers and pharmaceutical companies have a big problem with accumulated stocks of medicines and consumable materials obtained from humanitarian aid over the past decades. At the








same time, inventories are piling up in the homes of citizens who purchase drugs for "don't give, God" and then when it expires thrown into drains, containers, on the garbage without thinking about the consequences. It happens that some people throw medicines in boilers and burning them with coal and firewood, which represent an attack on human health. Pharmaceutical waste depending on the species, must be packed in special boxes, containers and destroyed at high temperatures (1200 C) in furnaces with special filters that exist in the vicinity of Vienna, where many pharmaceutical companies from Serbia destroying their waste.

In pharmacies no special bins in which to dispose of medications that people are not in use. Instead of people take drugs with expired shelf life, in pharmacies for now people can just get a piece of paper with a phone number and Transfer station hours when citizens can submit written off drugs for a certain period.when citizens can submit written off drugs for a certain period.

Novi Sad is praised by the minister for drugs that people are bringing passed all measurement procedures, classification according to pharmacological groups and were transported specially marked vehicle to the Transfer Station, which is in the center of Novi Sad.

He's also called on all citizens not to throw drugs where they do not belong because it is a hazardous waste that threatens the environment, and appealed to other towns and municipalities throughout Serbia to engage in this activity and organize the collection of medical and pharmaceutical waste to prevent that the hazardous chemical waste not reach where it should not (in groundwater) and thus threaten not only humans but also wildlife.

Waiting for the state to divide containers launched a project sorting and collection of pharmaceutical waste. In the past two years in the warehouse were collected and classified nearly two tons of drugs with expired shelf life, while once a month and collect up to 200 pounds. Old drugs are collected from citizens, pharmacies and pharmaceutical companies to store in a safe place.

Pharmaceutical waste means waste that is grouped into two main groups according to place of origin: the waste generated in the production cycle of drugs, medicinal products and medical devices, i.e. industrial framework, waste originating from drugs with expired shelf life that can be found in the warehouses of wholesalers, pharmacies and so on, or on humanitarian aid. Drugs are considered preparations established quality and quantitative composition of the produced industrial or laboratory, and placed on the market in the form and packaging manufacturers especially as finished drugs. Drug substance, specific chemical composition of mixtures of drug substances (semi), as well as herbs and medicinal substances of plant and animal mineral and synthetic origin are used for the development and production of drugs.

Products in pharmacies made of medicinal substances in quantities to which the finished packs per day according to the recorded needs based on individual recipes and galenical preparations highway.

In addition to the problems of waste treatment that arises from the production cycle of the pharmaceutical industry, a particular problem and makes a substantial amount of drugs with expired shelf life as in warehouses and those from humanitarian aid. Given that Serbia wants to join the European Union, it is the convergence of their standards and thus









solving the problem of waste. Also a number of international conventions in the field of environmental protection oblige us to act with the waste products that they prescribe.

If the composition of the wastes is not known, it is necessary to examine the composition of the waste, in order to determine whether the waste has characteristics of hazardous waste. If the waste has any of the following characteristics of hazardous waste (H1 to H14, with limits that were previously given), considered to be hazardous waste: Explosiveness H1, H2 ability oxidation substances, H3A Highly flammable (flash point below 21oC), H3 flammability (flash point < 55 $^{\circ}$ C), Iritancion H4, H5 harm, H6 toxicity, carcinogenicity H7, H8 corrosivity, the infectivity of H9, H10 toxicity to the reproductive system, mutagenicity H11, H12 Substances and preparations which, in contact with water, air or acid release yoxic gases, H13 Substances and preparations that create a product that erosion has any of the above properties, H14 ecotoxicity.

Pharmaceutical waste can contain substances in supplements Directive on Dangerous Substances Directive (65/548 / EC /) which includes other hazards besides H9- infectious. With the following types of waste must also be treated as hazardous waste (it is necessary to be stored as hazardous waste) barium, cadmium, cobalt, lead, mercury (including amalgam) nickel, silver and most of their compounds (but not barium sulfate).

Cytotoxic and cytostatic waste is hazardous medical waste generated in connection with the implementation and production of pharmaceutical products with cytotoxic properties including primary packaging of all the equipment used for the preparation and implementation of such products, as well as blood and body fluids contaminated with the above mentioned drugs.

Cytostatic pharmaceuticals, formerly called antineoplazmatici or anti-cancer drugs, they have the ability to kill or inhibit the growth of living cells. They are used in chemotherapy, which is carried out in specialized institutions in Serbia. If released into the environment can create serious problems in their effects on reproductive processes in various life forms. Therefore their disposal must be carried out with particular care.

Cytostatics must be segregated from other drugs and stored separately in clearly marked containers with solid walls. Ideally should be securely packed and returned to the supplier for disposal.

Cytostatic drugs (odosno waste) should never be disposed of in a landfill in the untreated state, but only after encapsulation or deactivation. Working team that handles these drugs in a medical institution must avoid puncturing the packaging or remove products from their packaging.

They can only be discharged into drains after chemical decomposition, and must not be discharged untreated into surface water or natural waterways. This category belongs to any pharmaceutical product that has one or more hazardous properties of toxic, carcinogenic, toxic for reproduction, mutagenic. This can include drugs and pharmaceuticals in certain classes, such as antineoplastic agents, antivirals, immunosuppressants and other drugs.

Where there are a certain cytotoxic agents (eg. Fluorouracil, Cisarabine.), a protocol for waste management must include a risk assessment which must take into account the fact that when using this drug and when it comes to waste, there is a risk from the effects of toxic substances (eg. agents are teratogenic, mutagenic and carcinogenic) on the human body.









If we are talking about citototoksičnim drugs and devices (eg fluorouracil 5FU - Cisarabin, etc.), the risk assessment is necessary to note that there is a danger of toxic substances (for example, to indicate that the cytotoxic agents teratogenic, mutagenic and carcinogenic).

3. SITUATION IN THE REPUBLIC OF SERBIA IN TERMS PHARMACEUTICAL MANAGEMENT

Medical waste in health care institutions in the Republic of Serbia is created in uneven amounts, depending on the type of facility, number of beds, type of diseases and conditions that are disposed of, and the types of services oje in health care facilities are provided.

Disposal of various categories of medical waste in Serbia until 2008, performed in different ways in different health institutions. The Ministry of Health in 2007 launched specific actions to introduce a uniform system of medical waste management, and in particular the category of infectious medical waste.

Certain categories of medical waste can be a significant threat to the health of employees in health care institutions.

In addition to the health risks that result from direct contact, medical waste can have irreversible indirect health effects through contamination of water and soil during the treatment and final disposal and air pollution through the emission of highly toxic gases during incineration.

It has been proven that there is no method of waste treatment or disposal that completely eliminates all risks of medical waste carries a population of street environment. Generani depending on the type of technology the treatment of medical waste, residues can be transferred from one phase to the treatment of waste to another. For example, during the incineration process, i.e. incineration of medical waste, combustible waste components are converted into gaseous by-products (CO2, H2O, CO) and other gases and noncombustible components remain as ash.

Ministry of Environment supervises the work of the said hospital incinerators, and the process of closing them if they do not meet the criteria for rad.Samo in certain medical institutions perform sterilization of infectious medical waste and the already mentioned autoclaves that are very old. After sterilization, sharps are disposed of in the ordinary municipal waste containers.

The reform of the healthcare system in our country is aimed at improving the quality of health services, both in the state and private sector health care.

An important element is the improvement and proper disposal of medical waste, which is in accordance with national legislation and with the fundamental principles of professional practice of medical waste management, prevention of communicable diseases and health promotion.

The introduction of a unified system of medical waste management in the health sector in the Republic of Serbia is a prerequisite for the regulation system of medical otpadomu whole.

Consensus within the working group composed of eminent professionals in the field, it was agreed that the use of the European Waste Catalogue, which defines the basic categorization of medical waste, and attitudes in relation to segregation or separation,









labeling and treatment of different categories of medical waste, for use in medical institutions.

This directory is usually in effect from 2005 and its categories of waste are taken over the publication of the said domestic waste catalog (Regulation on the Classification, packaging and storage of raw materials, Official Gazette of the Republic of Serbia, No.55 / 2001) with slight differences. The ultimate goal is to contribute to the protection and promotion of health as well as reduce and control pollution of the environment. Lose their estimates show that the lager Sbiji currently about 200 tons of pharmaceutical waste, or medicines that are out of use. It is estimated that as many as 90 percent of pharmaceutical waste is generated in the household, although it is potentially toxic waste whose destruction requires a special procedure.

Disconcerting is that the drugs that are donated arriving nineties from around the world were stale or they are nearing the end of its serviceable life for a few months, so the Serbian served as pharmaceutical waste landfill which is now not easy to get rid of. Inventories usually unnecessary piling up due to procurement of drugs, threw usually in containers, hence the landfill and end up in waterways, where it became a danger to future generations of drinking water in which are dissolved antibiotics, sedatives, analgesics.

There are times that the medication thrown in boilers and burned together with wood and coal, not knowing that thereby threatening not only the environment but also your health. Safe storage and destruction of drugs in Serbia is not possible, because there is no adequate incinerator. Pharmaceutical companies, wholesalers and pharmacies generally adhere to strict regulations. The largest network državnh Pharmacy, Belgrade, solved a decades-old problem of accumulated faulty drugs in their home.

There were chemicals and drugs adulteration, to charities, and cleared everything he stood for years at the facilities. Now at the facility are not only procedures for waste management, but also its prevention.

4. CONCLUSION

Improvement of appropriate handling and disposal of medical and pharmaceutical waste is put the preservation of public health. Every member of the community has a right to be informed of the potential hazards to health.

The development of the pharmaceutical industry and an aging population on Earth has led to a widespread production and use of drugs, and this, in turn, to the generation of pharmaceutical waste.

Even minor concentrations of certain substances in medicines can have adverse effects on water quality, and consequently to human health. Medicines should not be disposed of via wastewater and municipal garbage, which, unfortunately, often the case.

As a state with one of the goals set to join the European Union, Serbia will have to make a series of institutional changes, but also a number of changes in the socio - cultural patterns that will (in some areas) necessarily lead to a change in the way of life of its citizens. One of these areas is the protection of the environment. In addition to the adoption of environmental principles at the institutional level, it is necessary to strengthen the environmental awareness of citizens, not only for the purpose of joining the EU, but also to the adoption of such values that will enable sustainable survival of our society as a whole.









For this purpose, it is necessary to inform citizens about environmental problems, promote ecological values, but, as importantly, to encourage their local activism and participation, both in environmental and in all other spheres of social life.

REFERENCES

- 1. www.serbianchamber.org.rs/pdf/guide-medicalwaste
- 2. <u>www.ecologija.org.rs/magazine.htm</u>
- 3. <u>www.wikipedia.org/sr</u>
- 4. <u>www.ledib.org/uploads/downloads/pdf</u>
- 5. www.ncrc.ac.rs/direction/guide201.pdf
- 6. <u>www.scrib.com/documents</u>
- 7. Berić S., Policy Online, Where I Throw Old Drugs, Belgrade
- 8. Đukić V. (2008), *Foundations and Environment*, Paneuropean University of Banja Luka
- 10. Trumbulović Lj.: Sources of Pollution
- 11. Jeličić Đ.: Pharmaceutical Waste Management









LEASING AND THE FINANCIAL LEASING MARKET IN SERBIA

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Summary: Theoretical representation of lease as a method of raising finance to pay for assets, whose application is growing expansively in both developed and developing countries, with special emphasis on the finance leasing market in Serbia and its regulatory framework. In addition, this study compares finance lease and loans as the traditionally most common sources of funding, both in theory and in the particular example, with the application of conditions of funding that exist on the market in Serbia in the second half of 2014.

Keywords: leasing, lease, market, Serbia, comparison

1. INTRODUCTION

A company that operates in countries with developed market economy, and in an environment that is characterized by modern business terms, has many sources of funding. In addition to traditional ways of funding business, whose appearance is related to the starting of business, with the development of market economy, there are also specific funding sources that should enable businesses to perform the activities in a timely and efficient manner. A relatively new business contract form, which should enable the cost-effective provision of necessary funds, is lease. More specifically, there is evidence that the first cases of leasing had been recorded back in Egypt, 3000 BC, where the leasing of things was a common phenomenon. However, only in the last fifty years these contracts are becoming more important and they can certainly be considered as a market innovation. Lease in its present form was first reported in the United States, in the 80s of the nineteenth century, and the first leasing company was founded by Henry Schoenfeld in 1952. After the first contract, which was more than successful, Schoenfeld decided to continue with the same practices, and the company still exists today as the "United States Leasing International Inc".

There is no need to have great economy knowledge in order to understand the concept of leasing. Translation of this word in Serbian language gives us the terms *rent* or *lease*. However, the things are not as simple, because the lease represents a complex business arrangement from both legal and economic aspects, and there are a multitude of modalities of this business relationship in practice. That is why it is necessary, when it comes to the analysis of the lease, to point out its features, types and advantages that lead to its expansive application, which in turn leads to the need to regulate it legally, as important type of contracts.









2. TERM AND BASIC FEATURES

In professional literature, the lease is basically defined as business relationship between two legal entities or individuals, in which one party gives to another party, for an agreed time, the right to use a certain space and/or equipment, while the other party agrees to pay an agreed fee for that period.

In our country, according to the Law on finance leasing in effect (Article 2 of the Law on financial leasing, 2011), finance lease is defined as a business of financial intermediation performed by the lessor, and which means that the lessor, while retaining ownership of the leased asset, gives the authorization to the lessee, for a certain time period, of possession and use of the subject to lease, with all the risks and all the benefits associated with the ownership, and the lessee pays the leasing fee in return, if at least one of the following conditions is fulfilled:

1) the subject of the lease is determined by the lessee;

2) the right of ownership of the leased asset is transferred from the lesser to the lessee upon the expiry of the period for which the contract is concluded, and following the payment of the agreed amount of leasing fee;

3) the lessee has a contracted right for option to buy the leased asset following the payment of the agreed amount of leasing fee;

4) the lessee has the right to extend the term of the leasing contract;

5) the period for which the leasing contract is concluded corresponds to period in which the whole or essential part of the subject to lease is paid off.

It is important to realize that the definition given by the law represents a general legal definition, that it ignores the economic elements that are of great importance for the market economies and, as such, cannot highlight a range of modalities of leasing arrangements and all their peculiarities.

As the International Accounting Standard 17 states, the essence of lease is that these businesses may have characteristics of sales businesses, and that's what sets it apart from a conventional lease. That is, lease represents not only, roughly said, a leasing of determined asset, but it is a certain combination of several elements such as the sale and purchase with the right to retain ownership following the payment of last installment, loans, provision of specialized services, as well as the leasing of certain space or equipment itself. Rather than buying cars, machines and other equipment necessary for the performance of business process, while paying their full cost, companies can choose to sign the leasing contract, then contact the authorized companies, and take necessary resources as a lease for a certain period. During this period, lessees acquire the right to use the given resources, but also the obligation to pay the agreed amount in installments, with common option to redeem the asset after the expiry of said period.

From this simple representation, we conclude that the leasing contract is very efficient solution economically for the procurement of funds necessary for the operation of every company, with particular effect in relation to small and medium enterprises, which, due to the impossibility of taking ordinary bank loans or taking them under extremely high interest rates, do not have better solution than leasing contracts. It is this fact that contributed to its global application, and many economic policy creators support it and put in the forefront when it comes to encouraging investment. This is supported by the fact that









in 2009, a purchase of new equipment and vehicles worth over \$25 billion was financed through leasing only in developing countries (Živković A., 2010).

3. CLASSIFICATION OF LEASES

The classification of the leases under International Accounting Standard 17 is based on the risk degree and benefits in relation to the ownership of the asset being leased, depending on how much they belong to the lessor, and how much to the lessee. Risks may include a loss due to idle capacity or technological obsolescence, as well as varying of the ROI due to changes in economic conditions, while the benefits include the expectations of profitable businesses during the asset's economic life and profits from increase in value or realization of a residual value.

Accordingly, we distinguish between finance lease and commercial lease. The first type of lease is characterized by a substantial transfer of all risks and benefits to the lessee, while a commercial lease represents a contract which does not transfer substantially all the risks and benefits related to ownership.

Given that our current legal framework recognizes only finance lease, we shall fully pass through situations that refer, individually or in combination, to the classification of lease as financial (IAS 17):

1) The ownership of assets is transferred to the lessee until the end of the lease term

2) The lessee has the right to buy the subject to lease at a price that is expected to be substantially lower than the fair value at the date when this option becomes exercisable

3) The lease term refers to the major part to the life of the asset, even in situation where the ownership is not transferred

4) At the beginning of the leasing the present value of the minimum leasing payments is greater or equal to the total fair value of the asset being leased

5) If the lessee may cancel the leasing, the lessor's losses due to the cancellation are borne exclusively by the lessee

6) Profits or losses from changes in fair value of the residual accrue to the lessee

It is necessary to mention a specific example of a land subject to lease, which, because of its characteristics of having an unlimited lifespan, generally represents commercial lease, because the user typically does not take substantially all the risks and profits incidental to ownership and it is not expected for the ownership right to be transferred to the lessee by the lease term.

A number of authors of articles on leasing also consider essential so called irrevocable lease, as a special type of lease, which may be revoked only in four cases:

1) In the event of an unforeseen event

2) With the permission of the lessor

3) If the lessee enters a new lease for the same or an equivalent asset with the same lessor

4) Based on the payment of additional amount by the lessee, so that is fairly certain from the beginning of the lease that the lease will continue









4. ADVANTAGES AND DISADVANTAGES OF LEASE

Lease, as a way of obtaining necessary funds, is characterized by a number of benefits for both the lessor and the other party, or beneficiary of the leasing contract. The most important thing being pointed out is the fact that the lease is often offered at no additional collateral. However, in countries in transition, such as Serbia, there is a custom to demand for additional collateral, but in this case it is far less than the traditional bank loans. Precisely for these reasons, another benefit may result, and that is time-saving, because the leasing contract can be carried into effect a lot faster and easier than the other types of bank loans. The flexibility should be noted too, for example the ability to start or expand a business with minimum capital as well as the possibility of establishing a repayment plan for lease installments in a way that answers the specific needs of the lessee. Since own resources are not being used with the acquisition by lease, the company's liquidity is increasing, or at least it is not jeopardized. And it is important that the company has the possibility of the loan should it be necessary, because the banks would grant loans to customers who are already using another loan with more difficulties and under less favorable conditions.

If we look at the lease from the aspect of the lessor, the advantages are primarily in greater security that occurs as a result of ownership of the leased item and in a simpler procedure of return if the lessee fails to comply with the contract. Other thing considered a major advantage of lease compared to conventional bank loan for the lessor are lower transaction costs, as well as less regulation due to less participation of deposits in these contracts. All this provides the possibility to leasing companies to be extremely effective with good business policies and the organization of the company.

However, lease, as well as any other funding source, has its disadvantages that need to be taken into account when making decisions. The key disadvantage is that the amount of compensation, which can be calculated monthly, quarterly, semi-annually or annually, substantially exceeds, in total, the purchase value of the subject to lease. The reasons for this are amortization and lessor's profit contained in the amount of the compensation. This raises another disadvantage. The amortization included in the amount of compensation prevents the lessee from forming the means of amortization.

5. PARTICIPANTS

In accordance with the UNIDROIT Convention on International Financial Leasing, adopted at a diplomatic conference in Ottawa in 1988 (Spasić I., 2009), with the goal of the international unification of the financial leasing business, lease is defined as a three-way transaction. This means there are three parties in the business: the lessor, the lessee and the supplier of the lease. Aforementioned parties enter into two contracts - one contract for the delivery and the leasing contract. The lessor is a person who, according to the specification of the lessee, signs a contract for the delivery with the supplier, under which he acquires ownership of the leased item. The lessor also signs a leasing contract with the lessee, which obliges him, while maintaining the right of ownership of the leased item, to transfer the rights of use and possession of the subject to lease to the lessee for a specified time. By the same analogy we can draw the definition of the lessee and the supplier of the lease.









As far as the lessor is concerned, the law prescribes a minimum paid-in share of the core capital of the company, primarily to protect the security of legal transactions, and depending on whether the leased item is movable or immovable, it amounts to 500,000 euros, or 5,000,000 euros in dinar counter-value respectively. In addition to the initial capital, the said Act regulates also other issues related to the lessor, such as occupation, authorities, assembly, management bodies, structure, competence and meetings of the Board of directors, structure and competence of the Executive board.

6. THE FINANCIAL LEASING MARKET IN SERBIA

The leasing market in Serbia begins with the expansive growth from the adoption of the Law on financial leasing, June 2003, and the main stated reason is that the aforementioned Law provides summary procedure of return of the leased item in case of non compliance with the contract. Specifically, the application of lease, such as lease of electronic devices, existed even before the enactment of this law, only the volume of business, and thus the importance of the economy was much smaller. Upon the adoption of the Act, which implements the provisions of the UNIDROIT Convention on International Financial Leasing, financing of the purchase of equipment, vehicles and modern technology for small and medium-sized enterprises began.

The Association of leasing companies in Serbia, ALCS, was founded in June 2004, by nine leading leasing companies in Serbia. As a non-profit organization, ALCS represents the common interests of its members; it is committed to improving the leasing industry as well as the legal framework of business. As a member of Leaseurope, European Federation of Leasing Company Associations, which covers about 92% of the leasing industry in Europe, ALCS ensures the exchange of internationally accepted standards and ensures their implementation. Today, the Association consists of all leasing companies in our market, that is, the ALCS has 16 members and 9 associate members, which jointly contribute to the strategic objectives (http://alcs.org.rs, 2014):

1. Promotion of lease as a financing method,

- 2. Improving of the business environment in which leasing companies are operating,
- 3. Active effort to improve the legal framework for the leasing industry,
- 4. Representing of the joint interests of its members in government bodies and institutions,

5. Educational activities with the goal to improve the business of leasing industry, as well as a better understanding of lease as a financing method,

6. Quality consolidated information on the leasing market in Republic of Serbia.

As mentioned, financial leasing market in Serbia consisted of 16 companies at the end of 2013, from which 10% are majority-owned by foreign entities, and the founders of only two lessor entities do not belong to the financial sector.

To analyze the financial leasing market in Serbia, it is necessary to identify and interpret important indicators of this market and follow their trend in recent years.

From the beginning of 2000, the number of employees in the financial leasing sector has increased from year to year, until 2009, when downward trend has started until the 2013. In 2007, the number of employees in the financial leasing sector in Serbia amounted to 478, to increase to 518 at the end of 2008, while in the period from 2011 to 2012 the number of employees decreased for 56 (13%) (NBS, 2014).







478 516
516
489
476
482
426
435

Table 1: Number of employees in the financial leasing sector by year (2007-2013)

Source: NBS, Report of the financial leasing sector, April 2014.

Another important indicator is the market share. NBS calculates the Herfindahl-Hirschman Index quarterly, for monitoring the structure of the financial leasing market in Serbia and the degree of competition between the lessors. HHI is used to measure the concentration in the banking sector, but also in almost all other financial markets, and is obtained as the sum of squares of the market shares of all companies. In the event that there is only one market participant with a market share of 100% (monopoly), the value of this index is 10000, and it is its maximum value. Otherwise, when there are a large number of companies in the market, while each of them has a small market share, the value of HHI approaches zero (Krstić G., Šoškić D., 2012). According to the latest estimate, our financial leasing market falls into the category of a competitive market as shown by the Herfindahl-Hirschman Index, which was 875.8 at the end of 2013.

What may be of concern to lessors in Serbia is a negative overall result before tax on total market level of the financial leasing in 2013, which amounted to 2.3 billion dinars, while by comparison a positive result and 19.1 million dinars was achieved in 2012. Individually, eight lessors had positive result before tax, and the same number had negative result before tax, while total income and profits decreased by 21.6%, and total expenses and losses increased by 14.5%. It is necessary to mention that the most important category of profits for lessors in Serbia is interest income from finance leases (74.6% of total revenues in 2013), while on the expenditure side the main role have net expenses from the valuation of liabilities (25.8% share of total expenditures in 2013).

6.1. Investment structure and sectoral structure

Investment structure towards the lessee is characterized, according to data of NBS for 2013, by a high investment share granted to companies that do not belong to the financial sector (84.6%), while the share of other lessees is much lower. Entrepreneurs are in second place with 3.8%, followed by the farmers with 3.6%, individuals with 3.4% and public companies with 3%.





Source: NBS, Report of the financial leasing sector, April 2014.

When it comes to the subject to financing, the biggest share, as expected, has funding of commercial vehicles, minibuses and buses, with 34.9% in 2013. This is followed by the passenger vehicles with 24.8%, then financing of production machines, agricultural equipment, construction machinery and so on. It is important to note that all categories of subjects to financing record a slight decline in participation over the previous year, except for the category of trucks and buses (from 33.3% to 34.9%), rail vehicles and vessels (from 1.2% to 2.9%), other chattels (from 6.9% to 8.1%), and equipment for the provision of services (from 2.7% to 3.9%).



Source: NBS, Report of the financial leasing sector, April 2014.

The analysis of the financial leasing market in Serbia leads us further to the sectoral structure of investment, where at the end of last year the largest share had respectively following sectors: transport, storage, information and communication (29.1%),





manufacturing sector (21.8%), trade (15%), agricultural (9%) and construction sector (8.7%).



Source: NBS, Report of the financial leasing sector, April 2014.

6.2. Comparison of financial lease and loans, as alternative forms of financing of assets, on the particular example

Financial lease and loan are two ways for legal entity or individual to obtain the necessary funds. However, while leading to the same goal, there are fundamental differences between these two sources of funding, and it is necessary to compare the advantages and disadvantages of each in order to make quality decisions.

Even when the subject of financing is the same, the difference between leasing and loans can be seen even at the moment of applying for financing. The very procedure of approval and contracting is significantly simpler and shorter in case of financial leasing.

Further, while the repayment of both funding sources is made in installments, in case of lease payments are made at the expense of total revenues. The fee is covered with the inflow of revenues based on the income, generated by the subject to lease, and as such represents an expense that is recognized in the income tax, that is, it represents item deducted from taxes.

A significant difference exists also in terms of ownership of the subject to lease. In the case of loans, the company buys an asset and automatically becomes its owner, while in the case of financing lease the property belongs to the leasing company, and the lessee company has no right of alienation, but only the use of assets in accordance with the contract.

Due to non-compliance with the contract, postures, subject to lease can be returned to the leasing company, while in the case of loans nonpayment can lead to loss of control over the company, and even to bankruptcy.

We may also show the comparison of financial lease and loans as a source of funding on a particular example of procurement of vehicles.

If we want to buy a new car with a gross acquisition value of 9900 euros, with 5 years (60 months) repayment period, where after the last payment we shall achieve full ownership of a given item, the lessee has to meet the following requirements (Intesa, 2014):









- The share of 20.83% of the gross purchase value (VAT the subject to financing)	$\Gamma + 5\%$ of the net value of
- Interest rate 7,2%	
(1) The gross purchase value of the subject to financing	9 900,00
-VAT	-1 650,00
Purchase value of the subject to financing	8 250,00
(2) Share 20,83%	2 062,50
5% of the net value of the subject to financing	412,50
VAT	1 650,00
(3) The net amount of financing (1-2)	7 837,50
We calculate annual annuity with the following formula:	
$a = g x (p^{n} x (p - 1) / p^{n} - 1)$	
a - annual annuity	
p - interest rate	
n - repayment period	
With substitution, we get:	
$a = 7.837,50 \text{ x} (1,072^5 (1,072 - 1) / (1,072^5 - 1))$	
a= 7 837,50 x 0,238	

$$a = 1 865, 32$$

When we divide it by 12 to get a monthly annuity, we get 155.44 euros on a monthly basis for the amount of installment.

Conditions for regular bank loans are different. For the same amount (9900 euros) and a repayment period of 5 years the following conditions are offered:

- Share of 30.83% and a nominal interest rate of 11.2%.

(For the analysis we take only a nominal interest rate because it represents the cost of repayment of loans and because it represents a basis for calculation of the monthly installment).

(1) The gross value of the cost of the subject to financing	9 900,00
(2) Share (30,83%)	3 052,17
(3) The amount of net financing (1-2)	6 847,83
The same formula is used to calculate appuities:	

The same formula is used to calculate annuities:

A= 6 847,83 x ($1,112^{5}(1,112-1)/(1,112^{5}-1)$) A= 6 847,83 x 0,27 A= 1 848,91

When we divide it by 12, we get a monthly installment of 154.07 euros.

Based on the given comparison we can conclude that the installments are almost identical, but the advantage should be given to financial lease, because not only that the nominal interest rate is lower, but in the case of ordinary loans it is necessary to pay the share of almost 1 000 euros more than in the case of financial lease.

7. CONCLUSION

Lease represents a flexible and efficient way of financing of assets, while it does not distort liquidity, does not endanger the credit worthiness of companies and enables avoiding of the costs for obsolete assets. It can be also the ideal way to obtain those resources for









which there is no permanent need in the company, as following the expiry of the lease period they can be returned to the lessor. Lease has special importance in case of financing of small and medium-sized enterprises that have available sources of funding under much worse conditions than it is the case with large companies with good credit worthiness.

The leasing market in Serbia is developing rapidly and it is directed at both legal entities and to meeting the needs of individuals. Regardless of the economic crisis, whose effects leave consequences in this market too, it is believed that it will continue to grow, especially because the long isolation and, until recently, the existence of public enterprises (whose privatization is not fully completed), have led to the obsolescence of machinery and equipment, whose replacement is an imperative in modern market conditions.

According to the Association of leasing companies in Serbia (ALCS), only in the first quarter of 2014, 49.3 million euros was financed by the leasing industry. Although it represents, compared to the same period of last year, a drop of 2.7 million, it is considered to be the consequence of the overall slowdown of the economy in Serbia and it is predicted that the leasing industry will grow by the end of the year (http://alcs.org.rs, 2014).

According to the same report, there has been an increase of 4 million euros in financing of passenger vehicles in 2014, compared to the first quarter of last year. As the passenger vehicle represents a significant market for leasing companies, ALCS held a conference at this year's Car Show, where it is said that the competition among leasing companies has led to the cars being the most accessible this year, and that, based on the costs of leasing, Serbia is already at the level of the European Union.

The conclusion is that the financial leasing market in Serbia is slowly stabilized, and according to the Association, the annual investments range from 260 to 280 million euros.

REFERENCES:

- 1. Article 2, Law on financial leasing ("Official Gazette of the Republic of Serbia", no. 55/2003, 61/2005, 31/2011 i 99/2011 and other laws)
- 2. Živković, A. (2010), Monetarna ekonomija, Ekonomski fakultet, Beograd
- 3. International Accounting Standard 17 (IAS 17) Leasing
- 4. Spasić, I. (2009), Unidroit doprinos unifikaciji nekih od najvažnijih pitanja međunarodnog trgovinskog prava, Institut za uporedno pravo, Beograd
- 5. <u>http://alcs.org.rs</u>
- 6. NBS, Izveštaj sektora finansijskog lizinga, April 2014
- 7. Krstić. G., Šoškić. D. (2012), *Ekonomska statistika*, Ekonomski fakultet, Beograd
- 8. On the basis of the informative offer no. 757, 14 July 2014, Intesa Leasing doo Belgrade
- 9. http://alcs.org.rs, Vodič kroz lizing, accesed in Jun 2014









ECOTOURISM OF GREEN MOUNTAINS

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Abstract: Excursion tourism has managed to get interested a large number of tourists in nature, education, recreation and active leisure. The high level of health and recreational functionality of the elements and ambient environmental characteristics of the wider area are fundamental values for large-scale development of this type of tourism.

Key words: tourism, human environment, ecological-space consequences, mountain

1. INTRODUCTION

Tour of valuable habitats, preserved ecosystems, rare species, biodiversity and tourism, environmental values, habitat degradation - are some of the frequently mentioned concepts in the new arrangements of nature based tourism. Tourism development is significantly higher than in other activities determined by the quality of environmental compartments, its natural and cultural values, as the degree of conservation and the attractiveness of the environment directly affect the opportunities for tourism development in a given area, especially when it comes to recreational tourism. Tourism is a kind of link between urban centers and areas with good source and nature conservation. Increasing pollution of urban and industrial centers reinforces the need for tourism development, aimed at non-urbanized environment. Covering large areas of preserved nature, tourism is an activity that valorises the elements of space suitable for a variety of other activities of marginal significance (sandy, pebble and rocky sea coast, lakes and rivers, lookouts, mountain slopes are covered with snow, swamps, caves and sinkholes, relict and endemic species of plants and animals, the sun and the picturesque landscapes).

2. THE ECOTOURISM

Ecotourism is a new model of life in the context of rising awareness on the correlation and interdependence of tourism and environment (alternative tourism, eco-tourism, ethical tourism, communes, green tourism, sustainable tourism). However, most often mentioned as ecotourism and sustainable tourism, based on the preservation of environment not all of its potential. Ecotourism destinations are travel arrangements that challenge the immediate enjoyment of nature and direct contribution to the preservation of our planet. Ecotourism is a return to nature and entails a number of tourist and recreational activities: hiking, horseback riding, jogging, cycling, collecting herbs in the guide and others.

Ecotourism is considered as a growing market in the Tourism Industry. According to the World Tourism Organization with an annual growth of 5% worldwide, representing 6% of world GDP and 11.4% of consumption, eco-tourism deserves special attention. Ecotourism in the world is quickly becoming the most popular type of holiday.









Ecotourism is based on natural forms of tourism in which the main motivation of tourists is watching and enjoying nature and traditional culture that prevails in this area. Also:

- ecotourism includes educational features,
- ecotourism is organized in small groups,
- ecotourism minimizes the impacts on the natural and socio cultural environment,
- ecotourism supports the protection of natural areas (providing economic benefits to local communities and alternative employment, increasing awareness about preservation of natural and cultural resources among both local population and tourists).

Types of eco-tourism: ecotourism in protected areas, ecotourism in green mountains, "white" water tourism, adventure tourism, sightseeing tourism, local festival tourism, Eco - Ethno centers, eco-education centers, green hotels.

3. ECOTOURISM OF GREEN MOUNTAINS

Šar Mountain



Shar mountain, or as they call it - Imperial mountain, is regarded by many as the most beautiful mountain in Serbia, with 30 peaks higher than 2500 meters. An area of about 39 000 ha is protected as National Park "Sharr Mountain" in 1993. It is planned to extend protection to the area of over 90,000 ha. National park lies on the northern slopes of the Sharr and represents the biggest center of bio-diversity in the Balkans, with 330

endemic species. Objects of cultural heritage are noumerous, and the most important one originate from the Middle Ages. "Prizrenska Bistrica" is the most interesting river at the Shar mountain - it outflows from a massive lake and empties into the White Drim, creating numerous waterfalls on its way. Climate conditions, snow cover from November to May, suitable slope and elevation differences of individual paths are classified among the most famous centers of alpine skiing in Serbia. In summer, there is the possibility for recreational walks, picking herbs, hiking and sightseeing tours. Rich historical heritage is reflected in over 30 churches and monasteries.

Golija Mountain



Golija Mountain is one of the most beautiful and the most forested mountains in Serbia. It is located 45km southwest of Ivanjica and provides great opportunities for relaxation and recreation in a virtually untouched nature. The highest peak is Jankov Kamen (1833m). Lower parts of Golija are covered with oak and beech forests, while mixed forests of beech, fir and spruce are located in the upper parts of the mountain. Golija Mountain is significant natural wealth. The mountain is heavily

forested, with significant biodiversity. Golija's plants account for 25 percent of









Serbia's flora. 95 registered species of birds make it one of important mountainous European ornithology reserves. 22 species of mammals include rare and protected wolves, brown bears, least weasels, dormouses, red squirrels and water shrew. In 2001, the UNESCO declared Mount Golija as the Serbia's first biosphere reserve.

Kopaonik Mountain



Kopaonik is one of the larger mountain ranges of Serbia. It is located in the central part of Serbia, extendeds to North while а small portion Kosovo. The mountain is characterized by a relatively flat region, at an altitude of about 1,700 m. central Kopaonik plateau is called Suvo This Rudište. It is surrounded by mountain peaks, and the highest among them is Pančić's Peak, 2017m above sea level. To the north and northwest of this plateau

stretches Banjski Kopaonik, which is the location of Jošanička Banja spa, whose strong springs' waters reach the temperature of 88 °C (190 °F). Directly below the Suvo Rudište plateau starts the attractive and picturesque valley of the Samokovska River, characterized by its steep run, numerous rapids, falls and gorges (<u>http://en.wikipedia.org/wiki/Kopaonik</u>, 2014).

Kopaonik is also called Serbian Ural. Kopaonik has a subalpine climate. Because of over 200 sunny days annually, Kopaonik is rightly called "Mountain of the Sun". Because of its natural resources, in 1981 a National Park Kopaonik was declared. National Park covers an area of 11 810ha. By the number of endemic species, Kopaonik is one of the most important centers of biodiversity in Serbia. Variety of animal species, including its golden eagle, peregrine falcon, tawny owl, mountain dormouse, dormouse, wild cats, deer and others, deserves considerable attention. Sports and recreation are key factors to the tourism of Kopaonik. Kopaonik is mainly a destination for skiing and snowboarding. There are various other activities as well, such as walking tours, mountain biking tours, tennis, horse riding, basketball. Other features which attract tourists are a luxurious hotel, and entertainment. Kopaonik has many cafes, bars and night clubs. It has 24 ski lifts, with 70 km of ski slopes for all categories. The duration and quality of snowfall and ideal skiing grounds have been attracting a rapidly increasing number of guests. Kopaonik has mild winters with lots of snowfall (http://en.wikipedia.org/wiki/Kopaonik, 2014).

Zlatibor Mountain



Zlatibor is located in the southwestern part of Serbia, at the height of 700-1500m above sea level, 238 km from Belgrade, near Uzice and Cajetina. The highest mountain peaks are Tornik 1496m and Čigota 1422m. Zlatibor Mountain is one of the most popular tourist destinations in the Republic of Serbia. Due to the specific climate and characteristic air currents. continental and Mediterranean, which can only be found on this









mountain, harmonious relationship between landscapes of dishes, pine and spruce forests and spacious meadows, covered with colorful vegetation, rivers and streams, unpolluted air, clean and healthy water, a large number of sunny days per year, Zlatibor evolved into a famous tourist center, with a longest tradition of mountain tourism in Serbia. The procedure of bringing the act on protection for the Park of nature "Zlatibor", covering the territory of Uzice City and Cajetina and Nova Varos municipalities, was recently launched. Zlatibor is a center of health tourism, for its clean and dry air, low air pressure. Temperate climate of Zlatibor made it one of air spas of Serbia, and it is convenient for treatment of thyroid glands, asthma, anemia, metabolism diseases, cardiovascular disorders, nerve tension. Zlatibor is also famous as a skiing center, and it is the one of Serbia's largest centers of congress tourism. Sport and recreational tourism, ethno-tourism, rural tourism and ecotourism are also highly developed, due to rich cultural and historical heritage and exceptional nature.

Tara Mountain



Tara is one of the most beautiful mountains in Serbia. National park "Tara" located at the same called mountain is a part of the European federation of national parks - EUROPARC, together with four other national parks in Serbia. Beside the Serbian spruce and Pyrgomorphella serbica, Tara Mountain is a habitat for 53 species of mammals, 153 species of birds, bears, roe deer, mountain goats, rare species of birds: peregrine falcon, golden eagle, capercaillie,

short-toed eagle etc. On the territory of a wider area there was a record of over 1100 plant species, which is almost a third of the total flora of Serbia. So far the park has recorded 30 endemic plant species. Specific for Tara are the dense native evergreen forests, and it is dominated by mixed forests of beech, fir and spruce that cover more than 75% of the park, which makes it one of the most forested mountains in Europe. In the direct contiguity of NP "Tara" there are the following protected areas:

- The Zaovine Lake currently protected as an area of exceptional distinction, and an initiative has been launched to merge with the National Park.
- Šargan and Mokra Gora The area of Šargan and Mokra Gora is a protected area the park of nature, which has a recognizable railway with narrow tracks called the "Šarganska osmica" (The Šargan Eight). The impression is enhanced by preserved conifer forests inhabited by attractive species of flora and fauna.

Tara Mountain is known for health, recreational, hunting and fishing tourism.

Stara Planina (Old Mountain)

Located near the town of Knjazevac, Stara Planina is the largest mountain in eastern Serbia. This high mountain range of fascinating beauty and unspoiled nature is a natural border with Bulgaria. A one of the most beautiful mountains in Serbia, Stara Planina has vast potential for the development of tourism. This mountain is a natural resource of extraordinary importance as falls into the first category natural resources. This beauty is covered in snow for almost five months a year. Being between 1,100 and 1,900m high, it











has excellent potential for the construction of long alpine skiing runs. Babin Zub, situated at an elevation of 1,758m, is one of the most beautiful landscapes of Stara Planina. The striking rocks of Babin Zub end to the southeast of Midzor (2,169m high), the highest peak of Stara Planina and Serbia. Babin Zub is a protected natural reserve (<u>http://www.skijalistasrbije.rs/en/aboutresort-stara-planina</u>, 2014).

Fruška Gora



north to south. Its

Fruška Gora is a mountain in north Srem. Most part of it is located within Srem, Serbia, but a smaller part on its western side overlaps the territory of Croatia. Sometimes, it is also referred to as *jewel of Serbia*, due to its beautiful landscape protection area, nature and its picturesque countryside. To the north, the mountain is bordered by the Danube River. Lengthwise, it is approximately 80 km from east to west and is 15 km from highest peak is Crveni Čot at 539 m.

The slopes of Fruška Gora are perfectly suited for growing grape arbors on there, and there are many wine-makers producing Traminer, Riesling and other wines in the region. Many people have been captivated by its picturesque beauty, due to its outstanding location which is famous for the peaceful and lucrative lifestyles of its inhabitants, and a perfect destination for sightseeing where tourists can relax and enjoy themselves in the spectacular natural environment. Since 1960, there has been a large national park in the Fruška Gora that attracts a lot of visitors every year (http://en.wikipedia.org/wiki/Fruška_Gora, 2014). Thanks to its hospitable environment, there are also over a dozen Serbian Orthodox monasteries located on Fruška Gora. According to historical data, these monastic communities were historically recorded since the first decades of the 16th century. Legends, however, place their founding to the period between the 12th and 15th centuries. The monasteries are concentrated in an area 50 kilometers long, and 10 kilometers wide. In the course of centuries of their existence, these monasteries sustained the spiritual and political life of the Serbian nation. Fruška Gora Monasteries were declared Monuments of Culture of Exceptional Importance in 1990. and protected by Serbia are (http://en.wikipedia.org/wiki/Fruška Gora, 2014).

Zlatar Mountain

Zlatar is bounded by rivers Uvac, Lim, Mileševka and Bistrica, and has a total of four artificial lakes – Zlatar Lake, Radoinjsko Lake, Uvac Lake and Potpeć. Mountainous climate with significant mediterranean influence, dense pine forests, and a high number of sunny days, makes it suitable for medicinal purposes and altitude training. At the elevation of 1,237 meters, there is a Special Rehabilitation Hospital "Zlatar" with 330 beds. The highest peak is Golo Brdo, 1 627 meters tall. The name of the mountain ("Golden Mountain")









summed up all its properties: fragrant meadows and clear lakes surrounded by pine and birch trees, a blend of Mediterranean and mountainous climate, sunny days, salubrious air enriched with ozone, endless vistas... Mountain's morphology, climate and authentic nature make it a significant tourist area, where sport and recreation, pleasure, health, hunting, shopping and village tourism can be developed. This nature reserve, as well as ecological region full of scenery, clear waters rich in fish and untouched nature, draws the attention of tourists.

4. CONCLUSION

Recreational excursion movements have meaning, because they are short and have the character of refreshments, while on the other hand, their cultural meaning arises from the consciousness and habits of man for such movements. Analysis of Brijuni Tourist solely as a recreational form of tourism leads to the conclusion that the mass tourism and recreation and versatile form of transport, and that was a result of the development of civilization and its harmful consequences. As the most important factors that places an emphasis on the needs of tourist recreation are: fatigue, noise and air pollution.

Different security levels can be affected by the reduction of the number of visitors and move through these sensitive areas. Natural and national parks are already under great pressure the number of visitors, the need for variety of outdoor activities and increase capacity. Picnic grounds properties should be used for the arrival of tourists from neighboring towns, as well as for the design of more comprehensive, better and more functional room guests, and also to organization of active rest and recreation in the local population.

Nature conservation and tourism development are the two compatible and interdependent activities that must be constantly encouraged. The concept of sustainable development is increasingly applied in tourism, which from its massive stage passes to various selective and alternative forms. Quality of life and universal protection of the environment are becoming a prerequisite for finding a balanced policy that does not jeopardize the present, but without prejudice to the possibilities and prospects of future generations. Development of tourism based on the irresponsible use of resources threatens the carrying capacity of each area. Sustainable development is growth, but aligned with the needs of the people and the limits of nature.

REFERENCES

- 1. Trumbulović Bujić Lj. (2013), Environment and Tourism, written lectures, VPTŠ Uzice
- 2. Blagojević S. (2000), Ecology and Economic Development, Economic Faculty, Pristina
- 3. Stojanović V. (2006), Tourism and Sustainable Development, Faculty of Sciences, Novi Sad
- 4. <u>http://en.wikipedia.org/wiki/Ecotourism</u>
- 5. <u>www.dgt.uns.ac.rs</u>
- 6. www.serbianadventures.com
- 7. <u>www.durham.gov.uk</u>
- 8. http://en.wikipedia.org/wiki/Kopaonik
- 9. <u>http://en.wikipedia.org/wiki/Fruška_Gora</u>
- 10. http://www.skijalistasrbije.rs/en/about-resort-stara-planina







TOURISM OF HASHEMITHE KINGDOM OF JORAN

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Abstract: The Hashemite Kingdom of Jordan is a country in the Middle East that has great potential for the development of different forms of tourism. Its characteristics correspond to different groups of tourists and it stands out as a interesting and attractive tourist location. In Serbia, Jordan is minimally promoted because it is a luxury destination that makes it less suitable for Serbian standards. It is important to present this country as a great potential for various forms of tourism. The Hashemite Kingdom of Jordan has a long history which is expressed in variety touristic places and locations which are available for visit. Also, Jordan is a center of luxury, spa, business and religious tourism and the perfect place for both quiet and active holiday. Arab population and the Islamic way of life has always been interesting to western tourists, so Jordan presents attractive travelling destination for people from all over the world. One of the main problems in the tourism of Jordan is that the place where the country is located – surround of a war zone. Jordan demonstrates the diversity of activities in the tourism with a lot of attractions that can offer to foreign visitors as well as the growing tourism and its rapid development.

Key words: Tourism, Jordan, Aman, Wadi Rum, Akaba

1. INTRODUCTION

Jordan is located in the Middle East in the Southeast Asia. It borders with Israel, the area the West Coast, Syria, Iraq and Saudi Arabia. It has access to the Red Sea and the Dead Sea. Those two seas are quite opposite by their characheristic which also makes them significant touristic attractions. The Red Sea is known for its rich sea life: fish, corals, rare species... while, on the other side, sea life, except for some highly resistant microorganisms, can not exist in the Dead Sea. Number of population of this country is 4,800,000 mostly Arab population. Majority religion is Islam. The fact that Jordan is an Islamic country also, at some extent, affects the tourism of the country. In fact, at many touristic brochures, information, tourist sites etc. are stressed out a certain dress code and specific forms of wanted and unwanted behavior for foreigners who are not arabic nationality and who are not muslims. Specific forms of behavior are imposed to foreigners and they must conform to these rules while they stay in this country. Jordan is a kingdom and it s king is King Abdullah II, son and of a King Abdullah I. Jordan's queen Ranija is famous by advocacy for women's rights in this country and trying to adapt strict religious rules to a modern lifestyles. Weather in Jordan is characteristic by hot and dry summers and chilly and changeable winters followed by rain and, less frequent, snow. The relief of a country is such that in the east of the country there is a desert, and in the west highlands. The highest peak of the mountain Jabal Umm al Dami is 1,854 m tall.

2. TOURISM OF HASHEMITHE KINGDOM OF JORDAN

2.1. Characteristics of the capital city









The capital city, also the largest one, with over one million inhabitants, is Aman. Aman is an unusual Arab city, considering that extends over seven hills, just like Rome, while the typical Arab towns are generally placed in the plains. This town has a long history and a lot of the legacy from the early preiods of history, representing significant touristic attraction nowdays. In the Roman period this ancient capital was called Philadelphia. In the Roman period, this ancient capital was called Philadelphia. During the Byzantine period, it was the center of Christianity, but with the spreading of Islam, it became an Arab state and Philadelphia was renamed Amman. Towers and houses built even in the stone age which are descovered recently speak for themselves about the age and value of this city. The city is often called a place where the past meets the future because of many legacies of the ancient times and, at the same time, many modern buildings that adorn the city in the opposite way. The city Aman offers an interesting glimpse of the ancient buildings that testify to the rich history, but also, on the other hand, a view to an interesting modern and expensive buildings located in the area of history monuments. The most famous sights in Jordan are: the Roman amphitheater with 6,000 seats, which is placed under one of the hills of Aman; Fortress from the Roman and Byzantine era; The Temple of Hercules built in his honor which located in one of the seven hills of Amman and the place where the temple is located offers a magnificent view of the whole Aman; Archaeological Museum of Jordan which kept 700,000 years old exhibits; Jordan Folklore Museum which displays a nomadic way of life in Jordans deserts; Museum of national traditions in which visitors can learn about the life of the ancient Bedouin and Byzantine mosaics of Madaba; King Abdullah Mosque, built in 1982 and completed in 1989 by the founders of Hashemite Kingdom. The mosque is located in the area of 18,000 square kilometers; Mosque of Abu Dervis, which is a symbol of the city, is characteristic by the fact that entry is prohibited to non-Muslims. The Rainbow Street is the unavoidable stop for tourists who are visiting this city. Street is located beneath the hill Jab Al Aman and it s one of the favourite places for modern Arabs as well as for tourists. This street does not look like a glamorous avenues of Beirut and Dubai, it is a mile long series of different cafes, boutiques, bookstores and clubs, which are mostly themed, unique, and not in the Arab luxurious style. This street is charming and full of uniqueness and because of it is so well known and visited. The Rainbow Street is a place of launching the most controversial trends in cultural initiatives in this area, so it is extremely important also for the Arab population. Close to this street there is an open market on Friday named Souk Jara where gather local artists, artisans and traders who expose their products to the marketplace and sell. This is extremely lively and loud place where tourists can learn about the spirit and charm of the locals and also see different and interesting ways of trade.

2.2. Ancient cities

262 km away from the capital city there is a place that is most frequently the main reason for visiting Jordan - Petra. This city is called "The Ghost Town", "The Town of the Dead" and it is remarkably destination for tourists. Petra is a city full of of architectural structures that are sculpted 1,200 years BC by Nabateans using the unique kind of stone called pink stone and using special technique "from top to bottom".Impressive construction sculptured in stone represent a masterpiece of world architecture, especially considering under what conditions, at what time and with what knowledge are built. These unique construction arouse admiration by visitors as well as by architects all over the world. Petra is Jordan's largest touristattraction, and is registered in the UNESCO as "one of the most valuable cultural goods heritage of a mankind". Petra's most famous construction are: "The Urn Tomb," "









Nabataean temple of Al-Deir", " Khazne al-Firaun. Ancient city Jerash is located in the valley surrounded by hills. The city is 6,500 years old and it is one of the best preserved Roman provincial cities. The building reflect Roman provincial town planning, with its narrow streets, squares, fountains, ornamented gates and towers. Jerash can be best described by frequent sentence that Jerash is Rome away from Rome. City mosaic Madaba is famous as a ,,city of mosaic". It is located 30km away from the capital Amman. It is known for its spectacular Byzantine mosaics. The most famous of these mosaics are "mosaic map of Jerusalem" and the "Holy Land". The city is full of handicraft shops where tourists can buy different kinds of mosaic works. Also, this tradition is present in most houses in Madaba so different kinds of mosaic, including mosaics from early age, can be seen in houses of locals.

2.3. Biblical mountain and river

The holy mountain Nebo is located only 10km from Madaba. This mountain belongs to the mountain range of Abarim, and its highest peak with its 800m offer a magnificant view of the Jordan Valley and Dead Sea. This mountain is not impressively in their characteristics of the mountain, but the religious mythology related to it. In fact, according to the tradition of the Old Testament - God told to Moses toclimb right on this mountain in order to see The Promised Land - Palestine before moving to the Kingdom of God. It is believed that Moses was buried at this place and also is believed that he took his last breath here. Many pilgrims and tourists visit this place for religious reasons so it s very important in the Christian and Jewish traditions. Considering to the fact that Jordan has long and turbulent history, the country has several locations suitable for religious tourism which is very popular in this country. Surroundings of Madaba are rich with the Byzantine legacy so remains of the basilicas and mosaics from the 6th century can be found on this mountain. Biblical River Jordan is also one of the locations related to religious tourism.River Jordan is 320 km long and flows through Israel, Palestine and Jordan. It is one of the most sacred locations for Christians. This river is mentioned 175 times in The Old Testament and 15 times in The New Testament. The river marks the location where St. John the Baptist baptized Jesus Christ and, in the biblical history, this aria is also known as a place of several miracles. One of those is that Elijah and Elisha, apparently dried up the river in order to cross it. Many pilgrims and tourists come to this river to be baptized there. Up to 1995, when the peace agreement was signed between Jordan and the State of Israel, the zone of the river Jordan was hostile, surrounded by wires, minefields and under constant surveillance by soldiers. Approach to the river was shut down and the area around the river was closed to civilian activities. In recent years these two countries have significantly improved relations, and now Jordan is one of two countries that are at peace with Israel. Thus the river is free and safe for visitors of this significant river.

2.4. Desert Wadi Rum

Wadi Rum, also known as The Valley of the Moon, is a desert 100 km long and about 60 km wide. It is called "The Valley of the Moon" because of its unrealistic beauty of pink shades of sand and rocks. Tourists often show enthusiasm describing the feeling of walking through the desert like walking on the moon. In this unusual beauty rising up two peaks: Jabal Ram (1.754m) and slightly lower Jabal Um Ishrin, while the highest peak in Jordan - Jabal Umm al Dami (1.854m) is located 30km away from the desert. Desert has been connecting Arabia with Syria and Palestine for centuries, so the traveling salesmen









have stayed at this place. Since they mostly traded with fabrics and a wide variety of spices, this desert is also called " Since mostly traded with fabrics and a wide variety spices, this desert is called the "The spice trade". Traveling traders are, among other things, stopped at this point because of the many sources of water in Wadi Rum. Even though it is a desert it is very rich with water and is a major supplier of water in the entire Jordan. Besides the impressive beauty of the desert, in fact, its greatest value consist of about 20,000 inscriptions in rocks that are thousands of years old. Thanks to these inscriptions, that numerous nations left in the rocks, now is possible tracing the evolution of of human thought and also was possible early development of the script. Besides the natural beauty, this desert also has a significant historical value. The desert was quite unknown to the rest of the world, untill it was presented and glorified by a British colonel, archaeologist, an intelligence officer, adventurer and writer Thomas Edward Lawrence, known as Lawrence of Arabia. He spent some time in the desert researching and during his stay he was fascinated by beauty of Wadi Rum so he turned his impressions and adventures into the book "Seven Pillars of Wisdom", by which is later recorded the film "Lawrence of Arabia", and thus he show and glorified the beauty of the unknowndesert. Wadi Rum is registered in UNESCO's list as a "mixed locality of cultural and natural World Heritage". Desert abounds with numerous petroglyphs, drawings and graffiti up to 4,000 years old. In the desert still live the old Bedouin tribes and the people of the tribes are very friendly and willing to accommodate tourists in their homes and offer them tea or coffee. Although they live in a primitive conditions they are trying to adapt to the tourists and they like to hang out with them, which is for tourists a remarkable experience. In Wadi Rum tourists can find many ways of enjoying and exploring this magnificent desert. It is possible to arrange accommodation in tents and hanging out with Bedouins by the campfire and tribal music, hiking, camel riding, rent a jeep, balloon ride and panoramic sightseeing of Wadi Rum. Various activities are available for tourists, for different interests and desires.

2.5. The modern center of the Red Sea

The headquarters of the modern way of enjoyment, nightlife, modern hotels, restaurants, luxury package is a major port of Jordan - Aqaba. This town is situated at the junction of land and sea routes linking Asia, Africa and Europe and in its port is anchored a wide variety of ships. This summer resort is luxurious and modern, with the newest trends and ways of enjoyment and relaxation. Aqaba is a town whose touristic offer is designed for extremely rich tourists. Luxury hotels and huge hotel complexes with the best and most luxurious restaurants, boutiques, contents that are rich with activities, modern ways of enjoyment are the main characteristics for Aqaba. Primarily, Aqaba is attractive for the beaches with access to the beautiful Red Sea. Red Sea is a very famous and desired destination among divers and fans of diverse sea life. This sea is the habitat of over 1,000 species of invertebrates and over 200 soft and hard corals. The seabed is full of exotic fish, various colors and shapes. Exceptionally beautiful scenes of colorful and vivid sea animals attract tourists from all over the world to visit the magnificent Aqaba. Nevertheless, the biggest attractions are the coral reefs and around 100 varieties of coral stone which can be seen in this sea. There is a plenty of activities organizing for tourists in Aqaba giving them the opportunity to enjoy they stay in Jordan and get familiar with all the beauties of this country. Diving tours for amateurs and professionals, watching the seabed from a glass bottom boat, different ships adapted for tourists and their enjoyment are just some of them.









2.6. Dead Sea

Dead Sea is a lake in the Middle East, which are usually called sea. This sea is related to a number of interesting facts that makes many tourists want to visit and enjoy its charms. Unlike the Red Sea, which has a rich sea life, in the Dead Sea life basicly doesnt exist, except for the most persistent microorganisms. This sea has the highest salinity compared to any other sea, even nine times higher than the standard salinity of seawater. The shores of the sea divide Israel and Jordan, and also river Jordan flows in the Dead Sea. Dead Sea has the lowest altitude of the land and the lowest point of the world, a water area is located at -422m. The sea intrigues variety of attractions, some of which are the following: water is constantly quite warm so to swimmers is not a problem to immediately and without heating enter into it; because of the high concentration of salt water of the sea is extremely dense and therefore it is not possible to sink; clay at the bottom of the sea is considered healing and used for a variety of facial and body treatments. Due to the benefits of the Dead Sea there is increasingly developing spa tourism in this area. Within the hotels, the spa centers, tourists are offered with different treatments using Dead Sea clay. Beaches that come out on this sea are quite unorganized and inaccessible, but many hotels have its own beaches equipped and adapted for tourist purposes. In addition, visitors have the opportunity, even if they are not hotel guests, to pay a daily ticket to stay at one of the beaches. In most cases, private beaches are very expensive, but can be found for up to 6 JOD per day (1 euro = 0.95JOD).

2.7. Tourism of Jordan

Jordan, as a country, invests a lot of knowledge and money in development of tourism, which is an important sector of the economy of this country. Besides cooperation and maintaining good relations with the neighboring countries, Jordan also tend to create environment in which tourists from different countries and different cultures are accepted and appreciated. However, despite the great openness and hospitality to foreign visitors, there are still certain rules that foreign visitors must adhere to when they are in Jordan. In most tourist brochures and booklets are specified important points for tourists about the manner of behavior in an Islamic state. First of all, the way of dressing, especially women, stands out as special and unavoidable issue. In Jordan, women still wear burgas and their clothes are additionally covered with it. It s allowed to foreign visitors to dress in their common way but within the boundaries of decency as it is considered in Islamic culture. That means that tourists need to think about how to dress in order to avoid embarrassment by locals. Furthermore, in a conversation with the locals, foreign tourists must make a bigger physical distance, than when they talk to Westerners. Also, tourists are usually warned that it's considered very rude to stand in front of Muslims who is praying in public, otherwise it could happen some unpleasant situation for visitors. During the most important month of fasting - Ramadan, it is important to know that, although tourists are not Muslims, it wouldn't be acceptable eating or drinking in public. Even restaurants that could make extra profit from foreign visitors do not provide them with the services of eating and drinking during the fasting time. Tourists can only eat and drink in their room in which they are located. Differences in culture, in this sense, can be an obstacle to the development of tourism, but Jordan still has so attractive localities to offer to a foreign tourist and because of that they are willing to adapt to the local rules. State is trying to honor the faith, but also make compromises to offer tourists a pleasant stay in their









country. Locals in Jordan are usually quite hospitable and friendly, but feel offended when someone breaks the rules, which can be uncomfortable for both, locals and tourists, in that case. The most primitive way of life can be seen among the elderly Bedouins within their tribe, but they are generally quite liberal and willing for socializing with tourists.

3. CONCLUSION

Jordan develops cultural, spa, religious, business, sports and recreation, adventure, luxury tourism. The diversity of the state and the combination of natural beauty, historical value, human influence in terms of investment in the luxury complexes and organizing various of activities, led Jordan to the high place in the field of tourism. Tourism is one of the most developed sectors of the economy of Jordan and wages from tourism is sufficient to encourage more investments in this area. Curios tourists are usually attracted to this country because of unusual people with interesting lifestyles. The greatest virtue of the Jordanian tourism is that it is not oriented only towards one group of tourists, but has something to offer to different types of tourists: tourists of different ages, tourists with varied interests religious, cultural, social, tourists who want an active holiday, but also for tourists who want a quiet rest and relaxation-oriented holiday. Therefore, many tourists with different interests and orientations are visiting Jordan. The biggest flaw of tourism in Jordan is that Jordan islocated in the war environment, neighboring countries are at war, which directly affects tourism Jordan. Jordan is oriented to luxury tourism and hotels accommodation is mainly luxury category, offering many activities which are designed for tourists who have enough money to afford this unique and expensive experience. In Serbia, there are no many touristic offers for this country in touristic agencies, which correspond to a low interest of our population to this expensive and extravagant destination. Serbian market and our economic standard make this country inaccessible destination for most of our people.

REFERENCES

- 1. Curt R. (2002), Jordan in Transition, From Hussein to Abdullah
- 2. Kmal S. (1998), The Modern History of Jordan
- 3. Matthew (2009), The Rough Guide to Jordan
- 4. Oded E. (2012), The End of Jordan as We Know It
- 5. Robins P. (2004), A History of Jordan
- 6. Hading L. (1965), The Antiquities of Jordan
- 7. Tudrić M. (2006), *Jordan: Kraljevina Muhamedovih potomaka u Vreme 803*, 25 May 2006, <u>http://www.vreme.rs/cms/view.php?id=454079</u>
- 8. Library of Congress Federal Research Division Country Profile: Jordan, September 2006
- 9. Medical Tourism Jordan <u>http://www.medicaltourismco.com/jordan-hospitals/medical-tourism-jordan.php</u>
- 10. Economic Update Jordan: Year in Review 2012 http://www.oxfordbusinessgroup.com/economic_updates/jordan-year-review-2012
- 11. Jordan Tourism Board http://international.visitjordan.com/







WELL ORGANIZED SAFETY AND HEALTH AT WORK – PREREQUISITE FOR QUALITY OF LIFE OF EMPLOYEES

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Abstract: Safety and health at work is one of the key factors for quality work. Department of labor inspection of Zlatibor district indicates on normative regulation in area of safety and health at work, act on risk assessment, training of employees, use of funds for personal protection at work, at the same time, when it is necessary to carry out work banning. Inspectors often go to inspection surveillance, cooperating with magistrate, taking necessary measures to reduce injuries at work.

Keywords: security, health at work, quality of life, inspection.

1. INTRODUCTION

Protection of workers at the workplace, in terms of the labor relief and technological progress, is gaining more and more importance (Đuričić R.M., 2011). In Serbia, a special importance is given to safety at work - it represents a constitutional category and is regulated by laws, because it is of general public importance (Sudžum S., 1995), (Marković D., 2011), (Milutinović J., 1978).

Every year in the world, millions of accidents and injuries at work are happening. Some have death outcome, and the other permanent, total or partial inability to work. Every accident means time and financial loss. Accidents at work and occupational diseases are as much suffering as the economic losses. The world pays a heavy toll on the accidents at work (http://wwwserver.medfak.ni.ac.rs/PDF/Postupak%20prijavljivanja%20povreda_na%20rad_u.pdf), (http://www.minrzs.gov.rs/inspektorat-za-rad-nadleznost.php). Prevent them is the main task.

The goal of this work is to present the state of health and safety at work in Zlatiborskom county district (ZCD) and suggest measures for their improvement.

2. ANALYSIS OF ACCIDENTS IN ZLATIBOR COUNTY DISTRICT

Occupational accidents do happen, regardless of every undertaken security measures at work. Inspectorates for work record them. Department of labor inspection in the field of safety and health at work in the Zlatibor district is organized to collect, sort and analyze injuries at work (Table 1). For that information are given to them by people in charge of safety and health at work and who organized the conducted business of safety and health at work, reported to labor inspection all occupational injuries for which the employee is unable to work for more than three consecutive days. Labor inspection keeps all these









reports in the registers. It happens now and then that an employer fails to notify the labor inspection about work injury, but such cases are rare.

Table 1: Occupational injuries at work in ZCD for period from 2009-2013 (Base confidential	
information the Department of Labour Inspection in Zlatibor District. Uzice, 2014 th)	

OCCUPATIONA						- 2013. YEAR	84	25	29	31	25
BODY PART						BY DAYS OF THE WEEK					
Head	18	4	1	1	3	Monday	14	4	3	0	4
Torso	8	1	0	4	4	Tuesday	8	6	9	3	6
Hand	10	4	3	8	4	Wednesday	14	5	7	8	2
Hands and fingers	18	11	16	12	9	Thursday	32	6	4	10	7
Leg	12	2	7	4	1	Friday	8	1	3	8	2
Foot	2	3	2	2	2	Saturday	6	3	1	1	2
Other	16	0	0	0	2	Sunday	2	0	2	1	2
BY SOUR	CE ()F IN	JURY	Y		BY A	AGE	GRC	DUP		
Machines	14	11	11	11	7	Up to 20	0	1	0	0	0
Means of transport	10	5	9	2	1	21-25	6	3	7	2	1
and vertical											
transmission											
Other means	14	1	1	3	4	26-30	4	3	2	1	3
The material,	6	2	1	1	2	31-35	6	4	2	4	1
substance and											
radiation											
Work environment	6	3	2	7	2	36-40	12	1	0	6	5
Other causes	34	3	5	7	9	41-45	12	3	7	5	1
BY	SHI	FTS				46-50	14	7	4	4	5
I Shift	68	20	21	24	23	51-55	22	1	4	3	5
II Shift	16	4	7	7	0	56-60	6	2	3	5	3
III Shift	0	1	1	0	2	60-65	2	0	0	1	1
BY I	NDU	STRY	Y			BY QUALIFICATION LEVEL				Ĺ	
Industry	56	12	15	22	8	Ι	16	6	2	3	3
Agriculture	0	1	8	1	3	II	6	0	2	5	2
Waterpower	0	1	0	0	7	III	42	14	17	17	9
engineering											
Construction	14	3	2	2	2	IV	20	2	6	4	7
Transportation	6	1	0	0	0	V	0	0	0	0	2
Housing and	0	0	0	0	2	VI	0	2	1	0	0
Utilities											
Healthcare	4	0	0	2	1	VII	0	1	1	2	2
Other 4 7 4 4 2					BY GENDER						
						Male	60	21	25	27	21
						Female	24	4	4	4	4









Table 1 provides an overview of the injuries by: industry, qualification level, age group, gender, source of injury, days of the week, the injured part of the body and shifts. In the area of Zlatibor county district in the period from 2009 to 2013 there have been 33 serious injuries, 1 collective and 2 fatal injuries at work. In fact the most injured parts the body are hands and fingers (34%), hand - 15%, head - 14%, leg - 13%, torso - 9% and other 9% (Figure 1). In the same period, most injured by age are from 51 to 55 years - 18% of them, and those of 46-50 years of age - 17% of them, and at least those with up to 20 years of age (1%, which is in accordance with the percentage share of different age groups in the total number of employees (Figure 2).



According to a source of injury, on machinery goes - 28% of injuries, the means of transport - 14%, other causes - 12%, materials, work environment - 10%, substances and radiation - 6% and other causes - 30% (Figure 3). Most injuries (80%) happens in the first shift, in the second 18% and in the third - 2%, which is logical and fits the engagement of business subjects (Figure 4).











The largest number of injuries occurred to employees with the third level of expertise - 51%, then with the fourth - 20% and the first level of expertise - 15%. On all others goes 12% of injuries occurred (Figure 5). The largest number of injuries occurred in the industry (57%), than construction - 12%, agriculture - 7%, while on all other activities goes - 34% (Figure 6).



Highest number of injuries were occurring on Thursdays - 30%, then Wednesdays - 19%, Tuesdays - 16%, Mondays - 13%, Fridays - 11%, Saturdays - 7% and Sundays the least - 4%, which is logical (Figure 7). Men were more prone to injuries (79%) than females - 21% (Figure 8).











3. PREVENTION IN THE AREA OF SAFETY AND HEALTH AT WORK IN ZLATIBOR DISTRICT

About prevention in the area of safety and health at work, employers and the state are dealt with, through Inspections in the area of safety and health at work. Basis of inspection throughout the year was the Law of safety and health at work adopted by the national assembly of the Republic of Serbia in November of 2005. In the ZCD 7 inspectors are employed with college diploma. All labor inspectors are graduated engineers: four of mechanic, two of safety at work and one with a degree from the faculty of technology and metallurgy.

Basis for prevention is, first of all, good normative regulation in the area of safety and health at work. Employers from ZCD area, where inspection was conducted, have arranged the rights, obligations and responsibilities for safety and health at work. Large employers have arranged these issues in the collective agreement, and a portion of small and medium-sized businesses have dealt with this issue through Regulations and one part of employers have dealt with these issues in employment contract.

From day to day the number of employers who regulated safety and health at work by bringing Act of risk assessment on workplace in working environment is increasing, which manages the risk through five basic steps:

- Identification of risks which are the result of the presence of danger,
- Risk assessment which are the result of the presence of danger,
- A decision on protective measures to prevent or minimize the level of risk,
- The application of protective measures, and

• Monitor and review of the effectiveness of measures (Report of the Department of Labour Inspection in the Zlatibor district, Uzice, 2014).

With most employers in ZCD, mostly, are organized jobs in safety and health at work with one or two employees in order to comply with the minimum compliance with the law. Persons who manage safety and health at employers have passed the examination for safety and health at work in accordance with the Regulations.

An important preventive measure is to educate employees about safe and healthy work. The largest number of employers has evidence that his employees are trained for safe work. As a rule, all legal rules for the need for training are respected. The Law of safety and health at work predicts, that in some cases when the technological process requires, the employer conduct additional training about safe and healthy work. This additional training requires written instructions, notices and instructions. In the Zlatibor district most employers respect this obligation, which is defined in the act of risk assessment that they themselves have made.

Special attention is given to **workplaces with higher risk**, in accordance with the Regulations on previous and periodical medical examinations of employees in workplaces with higher risk. Employees who work in areas with higher risk rate have performed periodic medical examination. Employers have, by enactment of act of risk assessment, defined workplaces with higher risk and predicted health conditions that must be met by employees in these positions. With risk assessment act the periodic medical examination of workers engaged in jobs with higher risk are regulated. Assessment of the type and manner of these reviews are given by health services provider. Employers seek to empower









employees who are working in workplaces with increased risk with first aid knowledge, this training is mainly conducted through occupational health services provider.

Normative has also regulated preventive measure related to the **use of means and** equipment for personal protection at work. Large employers use personal protective equipment and means which are standardized, while at medium-sized and small businesses non-standard equipment has been met. The employer is obliged to provide an overview of the dangers and hazards that require the use of means and equipment for personal safety at work, inform the employee of the risk of injury occurrence and damage to health, for which he has an obligation to use given means and personal protective equipment at work.

In case there is an imminent threat to the safety and health of employee and that are using means of work on which are not applied security measures for safety and health at work, inspectors **ban further labor**.

The great importance in preventive action has been given to **Occupational Medicine** - Department of Occupational Health of employees at the Health Center of Uzice, which performs periodic medical examinations of employees. In the medical report occupational medicine states if an employee is medically fit to work in specific workplace. There is a present problem for some employers that considerable number of workers be declared unfit for work at their workplace. This is because the age structure of employees is not good, there is no recruitment of young workers for the workforce renewal. Some employers have fair amount of older age workers.

Labor inspection plays very important role in the prevention of injury at work. All inspections, for the period 2009 - 2012, are made based on the Instructions of the inspection in the event of fatal, collective and heavy injury at work No. 164-02 - 549/2007-01 (Table 2).

Year	No of regula r superv ision	Employ ees covered	No of controlle d supervisi ons	Number of inspection s regarding occupatio nal injuries	Decisions to remedy the shortcomi ngs	Decisio ns of work banning	Filed misdemea nor charges	Establishe d conditions of SAS
2009	783	12327	152	57	267	8	51	92
2010	534	7843	116	34	215	4	22	42
2011	488	8979	146	29	173	6	18	41
2012	386	9611	182	31	191	4	21	30

Table 2: The ratio of the engagemen	t of labor inspection	in the field of SAS
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From the table it can be concluded that there was a smaller number of regular supervisions, and a greater number of controlled supervisions during years observed.

Most common identified deficiencies within integrated inspections are:

- At act of assessment of risk in the workplaces and in the work environment,
- At training employees on safe and healthy work, and









• At training staff in first aid skill (Report of the Department of Labour Inspection in the Zlatibor district, Uzice, 2014).

In the field of labor relations, most common deficiency is in wages, salaries, compensation costs, in overtime work, and there is also illegal work.

Cooperation between the Labor Inspectorate and magistrate in the ZCD during 2013 has progressively improved. With well-designed control function of Inspections and the criminal policy can significantly improve the safety and health at work.

4. UNDERTAKEN CORRECTIVE MEASURES AND MEASURE PROPOSALS FOR SITUATION IMPROVING

Some inspectors made the decision to require a remedy of defects, and a decision order multiple measures. Almost all identified deficiencies have removed the employers after receipt of the decision of the inspector. There were instances that some employers require an extension of time for elimination of the established defect. Each of these cases, inspectors were individually evaluated and in most cases, leaving employers to meet. After the deadline to implement the court order, the control exerted control over the execution of the extent of the employer.

From the repressive measures, labor inspectors in the area of safety and health at work apply request for initiating criminal proceedings against a company and the responsible individual in company. Also, it is possible to apply request for legal proceedings against the entrepreneur, as well as the application of the criminal proceedings. Requests are being handled by misdemeanor authorities.

Proposed measures for situation improvement:

• Continue with permanent campaign of supervision;

• Organize the visit of representatives of the Inspectorate and representatives of the security authority on the electronic media that work in ZCD;

• Effectively conduct preparation and examination of the performance of the coordinator for the project making and the professional exam for conducting coordinator work;

• Adopt the Strategy of safety and health at work in the Republic of Serbia for the next period;

• Periodically organize monitoring of labor inspectors from another county district in the territory of ZCD;

• Continue with the rotation of inspectors in the supervision of employers;

• Furthermore influence to raise the rate of collection of fines imposed by the magistrate;

• To further improve networking of computers used by labor inspectors who are located outside the premises of ZCD;

• Issue forms for the record of supervision of the inspector, obtain personal protective means for inspectors for entering in to the facilities, perform a risk assessment for workplaces and bring comprehensive risk assessment act in write and with which to familiarize labor inspectors;

• Provide the needs of all organizational units by districts Law on safety and health at Work and all Regulations enacted under the same Act;

• Necessity of amendments and supplements certain provisions of the Labor Law, as listed in the quarterly reports;









• At the headquarters of the Department in Uzice to increase the number of inspectors in the field of labor relations;

- Intensification of vocational training for labor inspectors, and
- Establish better cooperation with other governmental agencies.

5. CONCLUSION

The quality of life of each employee is highly dependent on the applied measures related to its safety and health at work.

Occupational injuries and their prevention are very important for the employees and it is very important their reduction and elimination. Otherwise, currently or on a longer time is health of employees deteriorating and impairs the physical or mental integrity of the person.

In the Zlatibor district over the years the number of workplace injuries are decreasing, as is evidencing that it takes more care of employees and their safety at work, which has greatly contributed by the Department of labor inspection of the Zlatibor district.

As far as injuries concerned, hand and fingers are the most injured body parts with 34% in the period from 2009-2013. Injuries by source of injury, most of them were on the machines (28%). Most employees are hurt in the first shift (80%). The industry work is with the most injuries (57%). In this period, 2009-2013, Thursday is the day with the most injuries (30%). The age group of 46-50 years (17%) is the group with the most injuries at work. The third level of qualification level was most exposed to injuries at work, as much as 51%, and as far as gender concerned, male with 79% of injuries in the period 2009-2013.

Most injuries happened in 2009, the reason for it is that the explosion has occurred in the gunpowder warehouse in corporate governance "Prvi Partizan" Uzice.

Present state of health and safety at work in the Zlatibor county district is good. Employers are increasingly paying attention to the safety and health of employees and invest significant funds in the safety and health of employees. Business environment encourages employers to invest in the safety and health of employees. The work discipline has significantly enhanced in terms of the use of personal protective means and equipment in the workplace. Labor inspectors cannot enter without personal protective equipment of some companies in the Zlatibor district, and when they enter it is immediately noticeable that employees use protective equipment.

In the enhancement of the present state of safety and health of employees in the district labor inspection plays an important role, as well as the trade unions, chamber of commerce, the media, etc...

REFERENCES

- 1. Đuričić R.M., Đuričić M.M., Aćimović Pavlović Z. (2011), Savremeni integrisani menadžemnt sistem, IR-MIR, Užice,
- 2. Sudžum S., Stamatović M., (1995), *Povrede na radu i profesionalne bolesti, prava i obaveze*, "Zaštita rada" Beograd.









- 3. Marković D. (2011), Društvena sredina i povrede na radu.
- 4. Milutinović J. (1978), Organizacija zaštite na radu, Niš.
- 5. Zakon o osnovnim pravima iz penzijskog i invalidskog osiguranja.
- 6. Studio B, Teme: PROFESIONALNA OBOLJENJA, <u>www.studiob.rs/info/teme_stampaj.php?id=111 ½</u>, Autor : Željka Mrđa.
- 7. Zajednica zavoda za zaštitu na radu, "A. B. C. D. Zaštita na radu", treća i četvrta knjiga, Niš, 1970.
- 8. <u>http://wwwserver.medfak.ni.ac.rs/PDF/Postupak%20prijavljivanja%20povreda_na%20radu.pdf</u>
- 9. http://www.minrzs.gov.rs/inspektorat-za-rad-nadleznost.php, Sajt Republike Srbije, Ministarstvo rada, zapošljavanja i socijalne politike
- 10. Baza poverljivih podataka Odeljenja inspekcije rada u Zlatiborskom okrugu, Užice, 2014.
- 11. Izveštaj Odeljenja inspekcije rada u Zlatiborskom okrugu, Užice, 2014



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